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THE CINCINNATI

# LANCET AND OBSERVER,

**E. B. STEVENS, M. D., Editor.**

J. A. MURPHY, M. D., Editor of Medical Department.

W. H. MUSSEY, M. D., Editor of Surgical Department.

E. WILLIAMS, M. D., Editor of Ophthalmological Department.

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OFFICE, 319 ELM STREET.

## Contributors to Vol. XIII, 1870.

---

DR. A. ADDAMS.....	Cynthiana, Ky.
" F. P. ANDERSON.....	Resident Physician, Cincinnati Hospital.
" GEO. W. AKERS.....	St. Louis, Kansas.
" ROBERTS BARTHOLOW.....	Prof. Materia Medica, Med. Col. of Ohio.
" J. R. BLACK.....	Newark, Ohio.
" GEO. C. BLACKMAN.....	Prof. of Surgery, Med. Col. of Ohio.
" H. BRADLEY.....	Felicity, Ohio.
" J. BOWMAN.....	Flora, Ills.
" WM. CARSON.....	Cincinnati.
" P. S. CONNER.....	Prof. Surg. Anatomy, etc., Med. Col. of Ohio.
" C. G. COMEGYS.....	Cincinnati.
" R. S. CLARK.....	Cincinnati.
" JOHN H. CLARK.....	Mechanic'sburg, Ohio.
" W. J. CONKLIN.....	Asst. Phys. Southern Lunatic Asylum, Dayton.
" H. CULBERTSON.....	Zanesville, Ohio.
" J. T. DAVIS.....	Laconia, Ind.
" W. B. DAVIS.....	Cincinnati.
" WM. DICKEY.....	Indiana.
" W. W. DAWSON.....	Cincinnati.
" EPSTEIN.....	Cincinnati.
" A. N. ELLIS.....	Leavenworth, Kansas.
" R. F. ERDMAN.....	Resident Physician Cincinnati Hospital.
" N. G. GADDY.....	Vernon, Ind.
" A. B. HALL.....	Boston, Mass.
" J. W. HADLOCK.....	Cincinnati.
" T. C. HENRY.....	Cincinnati.
" HENRY ILLOWY.....	Cincinnati.
" JOHN D. JACKSON.....	Danville, Ky.
" AND. C. KEMPER.....	Cincinnati.
" W. M. LOGAN.....	Cincinnati.
" WM. H. MUSSEY.....	Prof. Surg. Miami Med. Col., Cincinnati.
" GEORGE MENDENHALL.....	Prof. Obstetrics, Miami Med. Col., Cincinnati.
" J. S. MOREL.....	Savannah, Ga.
" C. S. MUSCROFT.....	Surg. to St. Mary's Hospital, Cincinnati.
" W. H. MATCHETT.....	Greenville, Ohio.
" T. W. McARTHUR.....	Chillicothe, O.
" D. A. MORSE.....	Danville, Ills.
" Z. C. McELROY.....	Zanesville, Ohio.



# LIST OF CONTRIBUTORS.

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Dr. B. F. MILLER.....	Cincinnati.
" S. A. NORTON.....	Prof. of Chemistry, Miami Med. Col., Cincinnati.
" G. R. PATTON.....	Cincinnati.
" J. J. QUINN.....	Cincinnati.
" M. ROONEY.....	Vienna X Roads, Ohio.
" B. ROEMER.....	Charleston, West Va.
" GEO. H. RUSSEL.....	Cheyenne, Wyoming Ter.
" EDWARD REEVES.....	Prof. of Physiology, Med. Col. of Ohio.
" O. G. SELDON.....	Canal Dover, Ohio.
" T. C. SMITH.....	Middleport, Ohio.
" E. B. STEPHENS....	Prof. of Materia Medica, Miami Med. Col., Cincinnati.
" W. H. TAYLOR.....	Prof. of Instit. of Med., Miami Med. Col., Cincinnati.
" W. P. THORNTON.....	Cincinnati.
" J. S. UNZICKER.....	Cincinnati.
" F. R. VAN EATON.....	Corinth, Miss.
" JNO. F. WHITE.....	Cincinnati.
" JAS. T. WHITTAKER... ..	Prof. of Physiology, Med Col. of Ohio.
" GEO. E. WALTON.....	Cincinnati.
" M. B. WRIGHT.....	Cincinnati.
" W. W. VINNEDGE.....	Resident Physician Cincinnati Hospital.

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E. B. STEVENS, Editor.

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Vol. XIII.—JANUARY, 1870.—No. 1.

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Original Communications.

SPECIAL REPORT OF THE SECTION ON OBSTETRICS TO THE ACADEMY  
OF MEDICINE, J. J. QUINN, M. D., CHAIRMAN.

*Art. I.---Extra-uterine Foetation---Case of A. M. Brown, M. D.*

Summary of cases by Dr. J. W. Hadlock.

By extra-uterine foetation is meant the lodgment and development, to a greater or less extent, of the impregnated ovum without the cavity of the uterus. It is of comparatively rare occurrence, and is not confined to the human female, instances of it having been found in the lower animals. It has been divided into four varieties: *ovarian*, when the fecundated ovulum has been retained in, or not detached from the ovarium; *fallopian* or *tubal*, when it has been detached and subsequently arrested in the fallopian tube; *interstitial*, when it has been arrested in that portion of the tube which passes through the parietes of the uterus; and *abdominal*, when it has escaped from its bed into the peritoneal cavity. In addition to these a number of other divisions have

been made, as ovo-abdominal, when the ovule is partly developed in the ovary and partly in the abdomen; tubo-ovarian, where the cyst is formed conjointly by the ovary and the mouth of the tube; tubo-abdominal, where the placenta is attached to the interior surface of the tube, and the fœtus developed within the abdomen; utero-tubo-abdominal, where the placenta is attached to the internal surface of the uterus, the funis occupying a portion of the tube and penetrating through its walls to the fœtus within the abdominal cavity. Strange as it may seem, instances of this last species have been discovered. Hunter and Höffmeister mention cases of this character, and so do Dezeimeris and Patuna. All these divisions, however, with others that have been made, are but modifications of the four varieties which we have named. These, indicating the position in which the fœtus is developed, are for all practical purposes, all-sufficient. And even some of them are rejected by good authorities. Velpeau contends that there must be a rupture of the ovarian vesicle before conception, and hence that ovarian gestation is impossible. And in this he is supported by Allen Thompson; while Dubois, Campbell, and others, do not believe in the existence of abdominal pregnancy. That both these forms, however, do occur, is now generally conceded by obstetrical writers. Indeed, abdominal gestation is established by so many well attested cases that Cazeaux says: "We can no longer justly deny its possibility." And he adds that "in most of the published cases it is incontestible that the ovum had no relation with the internal genital organs whatever."

The cause of these forms of pregnancy is yet a matter of speculation. They have been attributed to the effects of terror at the time of fecundation; to a morbid condition of the whole, or part of the fallopian tube, rendering it impervious after conception; to disease in the coats of the ovum; to injuries immediately following coition, and other causes: but as yet no satisfactory cause has been assigned.

The general symptoms are those of natural gestation. After impregnation a determination of blood to the uterus takes place, the organ enlarges somewhat, and the deciduous membrane is formed within its cavity the same as in natural conception, although this is denied by Dr. Robert Lee, who mentions two cases in which he could discover no deciduous membrane. Menstruation ceases, the breasts increase in size, areolæ are developed, morning sickness sets in, and distention of the abdomen becomes apparent. Should the fœtus continue to live, quickening occurs at

the usual time, and motion is distinctly felt. If the development of the child should continue to the full period of gestation, symptoms of natural labor come on, which continue for a greater or less length of time, when the motions of the infant cease and the pains disappear.

These cases may terminate fatally from inflammation incited in the surrounding parts; from rupture of the sac and hemorrhage; or from the death and putrefaction of the child, and abscess and consequent exhaustion of the mother. Or they may recover either by ulceration and the escape of the fetus through the intestines or walls of the abdomen, or by the formation of the cyst and its contents into a solid, innocuous tumor, that may remain to the end of a natural life without great inconvenience to the woman.

The case presented by Dr. A. M. Brown, before the Academy and by it referred to the section on Obstetrics, seems to belong to the abdominal variety. The impregnated ovule appears to have escaped into the abdomen, and forming a sac, undergone development in apparently regular order until between the fourth and fifth months of gestation, when the cyst ruptured, hemorrhage into the peritoneal cavity occurred, and sudden death to the patient was the result. In the meantime the tumor became attached by adhesions to the left ovarium, uterus, urinary bladder, and a portion of the small intestines. Adhesions of the cyst to the surrounding parts are of usual occurrence in these cases. A case somewhat similar to this, reported by Dr. Schultze, is published in *Ranking's Abstract* for 1866. In that instance, instead of adhesions, there were perforations of the uterus, urinary bladder, intestine and abdominal wall. Gastrotomy was performed and the patient entirely recovered.

The progress of the case before us was similar to that of extra-uterine pregnancies generally; and its fatal termination was produced by the same cause that has produced death in every variety of abnormal gestation. Internal hemorrhage from rupture, however, is more rare in the abdominal than in the other species. Death in the former variety more frequently occurs from irritation and inflammation induced by the putrefying fetus and its envelopes, or suppuration and ulceration resulting from an effort of nature to rid herself of the offending mass. Of eighteen fatal cases mentioned hereafter, there were but two deaths from rupture and hemorrhage.

Here the question readily suggests itself whether there are not more extra-uterine conceptions than find their way into medical

reports. Are there not more than are even suspected, much less known by the attending physician? The mere suppression of the menses, with all the other general signs of gestation in its earliest stages, will not suggest the presence of an extra-uterine pregnancy. Neither may the particular symptoms of extra-fœtation, to which we will refer in another part of this report, be conclusive evidence of its existence. It is true that when all the signs are present, when the patient has suffered from frequent spasmodic or colicky pains, the last of which has been followed by quick collapse and sudden death as in the case before us, rupture of a uterine cyst and internal hemorrhage might be suspected. But death is not always sudden after rupture, and then the difficulty of forming an intelligent opinion, even after death, is increased. The hemorrhage may be arrested from some circumstance, and the extravasated fluids induce an inflammation which would lead to a fatal termination more gradually. The nature of the case presented to the Academy was revealed by an autopsy, but it is not every patient whose friends will permit a *post-mortem* examination to verify the diagnosis, or expose the true nature of the trouble.

Not only does the consideration of Dr. Brown's case bring up questions connected with abdominal pregnancy, but it suggests the entire subject of extra-uterine fœtation, as it is always difficult and some times impossible to distinguish one form from another, and as the treatment and general management of all are the same. We have thought that a summary of extra-uterine pregnancies, collected from different sources, would suggest the interesting points in this case and introduce the general subject of diagnosis and treatment to the Academy, as well as any other method of presentation. Such a summary, containing upward of sixty well marked cases, has been prepared with great care and labor by our colleague in the section, Dr. J. W. Hadlock, and is here offered as a part of our report.

It is not the object of Dr. Hadlock to furnish a complete list of all the cases that have been reported, or to give a detailed account of each case selected. His design has been to collect and classify in a general summary, from some of the ablest medical journals, cases not usually found in text books, and give their duration and manner of termination, with such reference to authorities as will enable the inquirer readily to find their history, study their peculiarities, notice their management, and judge for himself



whether any better results could have been obtained under different treatment. The following is the summary :

## OVARIAN.

In *Gynecological Journal* for September, 1869, p. 140, Dr. Perry reports a case: "The patient having been married eighteen years, and had never before been pregnant. Four weeks before death there had been an attack of syncope, relieved by morphia and stimulants. Another week later and then the fatal one. At the autopsy many coagula were found in the abdominal cavity, and within the left ovary a three months' fœtus."

In *Ranking's Abstract*, 1848, p. 186, is a case reported by Dr. Porter. Patient was taken ill July 15th, and died 25th of same month. An autopsy was had, when the left ovary was found enlarged to the size of a hen's egg. On making an incision in the ovary, a small quantity of water escaped, followed by a fœtus of perhaps six weeks; its size being about that of a honey-bee.

In *Medical Times and Gazette*, 1858, p. 276, Dr. Latty reports a case of this form, giving the treatment from day to day, commencing May 26 and continuing until July 23d, when patient died.

## INTERSTITIAL.

In *Medico-Chirurgical Transactions*, vol. 13, p. 33, are reported five cases, having existed from six weeks to eight months. Four died from rupture of the walls of the uterus and hemorrhage; the fifth, from Cæsarian section, by which a child weighing  $4\frac{1}{2}$  lbs. was removed.

In *Ranking's Abstract*, 1848, p. 143, is reported a case of four months' duration, where death came from rupture of the sac, followed by hemorrhage.

## FALLOPIAN.

The following are found in *Medico-Chirurgical Transactions*:

Vol. 7, p. 437, a case is reported where eight weeks after impregnation death was produced by hemorrhage from bursting of fallopian tube.

Vol. 8, p. 502, case of eight weeks' duration. Death from hemorrhage from rupture of the tube.

Vol. 13, p. 57, case of eight weeks. Death from hemorrhage, caused by bursting of the tube.

Vol. 31, p. 137, is given the history of five cases, from two to six months' duration. Four died from bursting of the tube, followed with hemorrhage; the fifth died from apparent exhaustion, as dissection did not reveal any lesion of the parts concerned.

In this connection is a description of five cases from seven weeks to three months' duration, preserved in the museum of St. Bartholomew's hospital.

Vol. 41, p. 1, case of four months' pregnancy. Death of patient from rupture of the tube and hemorrhage.

In same vol., p. 573, an account of the dissection of a recent case of four months' duration is given. Death from hemorrhage.

The following of the *tubular variety* are found in *The American Journal of the Medical Sciences*:

Vol. 20, p. 241, is given a case in the fifth month of pregnancy. Death from rupture of tube and hemorrhage.

In same vol., p. 519, is a case detailed of supposed tubal pregnancy that went to full term. Pains came on, movements of the child could be felt distinctly, but nothing in the uterus, which was completely retroverted. Case went on for a number of months, a tumor gradually formed in the side, in which the child could be distinctly felt. The patient recovered, but the tumor remained in the side still, and was supposed to be the child.

Vol. 20, p. 275, a case reported. Death produced at the end of third month by rupture of the tube, followed with hemorrhage.

Vol. 30, p. 403, case of four months. Death from rupture of tube and hemorrhage.

Vol. 23, p. 283, Dr. Boling reports a case that went to the seventh month. Gastrotomy was performed, relieving the patient of a fetus of five pounds. Patient entirely recovered.

Vol. 42, p. 239, two cases are reported, duration of pregnancy not given. Both terminated fatally, from hemorrhage.

Vol. 52, p. 204, case of three months' duration. Death from hemorrhage.

The following are found in *Ranking's Abstract*:

Vol. 38, 1863, p. 290, Dr. Fabbrie reports a case that went to full term. The tumor became stationary. She afterwards had three pregnancies, without any trouble in delivery; dying at the age of 55 years.

Vol. for 1850, p. 149, is a case reported where fallopian and uterine pregnancy existed at the same time. Both fetuses of the same age. Uterine fetus was aborted. In a few days the death of patient was caused by bursting of tube and hemorrhage.

Vol. for 1850, p. 229, the subject a married woman. The attack was sudden, with violent pain in the hypogastrium, accompanied by collapse. Patient died 52 hours afterward from rupture of tube and hemorrhage. Pregnancy six weeks' duration.

#### ABDOMINAL FORM.

The following are found in *Medico-Chirurgical Transactions*:

Vol. 5, p. 104, a case is reported where the child was retained fifty-two years; the mother dying at the advanced age of 80 years.

Vol. 8, p. 507, is given a case where the fetus was carried six years, then came away at intervals per rectum, with complete recovery of patient.

Vol. 13, p. 348, a case is reported where pregnancy went to full

term. The child was delivered through an opening made in the posterior wall of the vagina. Patient died third day after operation.

Vol. 31, p. 163, a case reported of twelve months' duration. Patient died from inflammation of abdominal viscera. Dissection revealed a large, well-formed child, sufficient to displace the thoracic viscera. Child weighed  $11\frac{1}{2}$  pounds.

The following are found in *The American Journal of the Medical Sciences*:

Vol. 2, p. 114, Dr. Heiskill, of Winchester, Va., gives a case in which the woman (an old negress) carried a fœtus forty years, dying at the advanced age of seventy-five years.

Vol. 2, p. 47, new series, a case is given where an abscess formed in the side; which, after discharging for a long time caused death of patient. The remains of a fœtus were found in the abscess.

Vol. 7, p. 488, in this case the patient had borne eight children, became pregnant with the ninth, went to full term, but was not delivered. In eighteen months was delivered of a child in natural labor. Died at the age of seventy-five years, having carried the ninth child thirty-seven years, and gave birth to the tenth child while carrying the ninth. The extra fœtus was removed at death and weighed over three pounds.

Vol. 11, p. 348, Dr. Yardley gives a case where the fœtus was retained fifteen years, during which time the patient was delivered of a full-grown fœtus at term, with the removal of the extra fœtus with complete recovery of patient.

Vol. 11, p. 351, Dr. Whinery, of Fort Madison, Iowa, reports a case where the mother carried an extra fœtus four years, during which time she gave birth to three children. She was then relieved of the extra fœtus by abdominal section, with complete recovery.

Vol. 12, p. 279, Dr. A. H. Stevens, of New York, reports a case in which he removed a full-grown extra-uterine fœtus, by abdominal section, ten years after conception, with recovery of patient.

Vol. 26, p. 348, is a case reported of four months' standing, patient dying of apparent exhaustion.

Vol. 30, p. 532, is a case reported of eleven months' duration, when the fœtus was removed per rectum, patient entirely recovering. Menses became regular, and patient enjoyed good health.

Vol. 46, p. 559, is a case reported where the fœtus came away intact, per rectum, the patient recovering entirely.

Vol. 25, p. 550, Dr. Peters, of Missouri, reports a case of three months' duration. Death of patient from rupture of the membranes and hemorrhage.

Vol. 35, p. 551, a case, of thirty-three months' duration, where an abdominal fistula formed, through which, by an operation, the child was extracted. Complete recovery of the patient.

Vol. 36, p. 44, a case is reported where, four years and six months after completion of term, the child was extracted per rectum, with recovery of patient.



Vol. 45, p. 130, Dr. Hicks reports two cases that were treated by abdominal section; one eight months after full term; no adhesions of the sac; patient died. The other about four years after full term; a number of adhesions of the sac were found; patient recovered.

In same vol., Dr. Brandt relates a case where the mother carried the child fifty-four years. In the mean time she gave birth to two children, and died at the extreme age of eighty years.

Vol. 50, p. 265, Dr. Hillman reports a case where Caesarian section had been performed. The fœtus was about eight months, and came away from an abscess that formed in the side. The patient regained her health perfectly.

Dr. Ainstie, in the *Medical Times and Gazette*, for 1858, p. 74, reports a case in which the fœtus was carried thirteen years, the mother in the mean time giving birth to two children. Patient died of peritonitis, at the age of thirty-nine years.

The following are found in *Ranking's Abstract*:

Vol. 43, p. 287, 1866, Dr. Schultze relates a case of eight months' duration, where there was perforation of the intestines, uterus, abdominal wall and the urinary bladder. Gastrotomy was resorted to, after which patient completely recovered.

Vol. for 1854, p. 163, Dr. West relates a case of two months' duration, where fœtus escaped into the peritoneal cavity, causing death at an early day.

Vol. for 1845, p. 170, case reported which was complicated with stone in the bladder. Patient died at the age of forty-six years, with great prostration.

Vol. for 1848, p. 143, a case reported—duration not known—where fœtus was extracted through the walls of abdomen, with complete recovery of patient.

Vol. for 1857, a case is reported where the mother carried the child twelve years, in the mean time giving birth to twins.

Vol. for 1853, p. 185, Dr. Ramsbotham relates a case of about two years' duration. The woman was tapped once, and about sixteen ounces of a dark fluid drawn off. She died finally from diarrhœa and low fever. Dissection revealed a large, well-formed child in a state of putrefaction, entirely shut out from the peritoneum by a cyst of false membrane.

In same vol., same p., is a case related by Dr. Langley of five months' duration. Death from rupture of the sac and hemorrhage.

#### MISCELLANEOUS.

In *The American Journal of the Medical Sciences*, vol. 3, p. 488, new series, a case of alleged tubal variety is reported—term of pregnancy not known—in which it is claimed successful artificial abortion was produced.

Vol. 44, p. 1, Dr. Adams gives a case of fifteen months' duration, but could not determine what form it was, in which he resorted to

gastrotomy, removing a child weighing four pounds and three ounces. Patient recovered.

Vol. 45, p. 252, Dr. Muller reports a case of gestation, the tumor projecting into an inguinal hernia. The child was removed by an operation, and was large and healthy. The mother died from hemorrhage.

Vol. 17, p. 22, a case is reported where the child was retained in the uterus for eleven years.

*Ranking's Abstract* for 1853, p. 188, Dr. Skirram relates a case where the fœtus developed in an inguinal hernia. An operation was performed and the child extracted living, but died shortly afterward. The mother entirely recovered.

Vol. 5, p. 104, *Med. Chi. Trans.*, is reported a case where the child, during labor at full term, from rupture of the uterus, escaped into the abdominal cavity and was retained five years, the mother in the meantime becoming pregnant with a second child.

Vol. for 1854, p. 163, *Ranking's Abstract*, a case is reported where the mother had borne two children, became pregnant with the third, went to term, the midwife attempting to turn ruptured the uterus; the child escaped into the abdominal cavity, where it remained fifty-four years, the mother in the meantime becoming twice pregnant, but aborted both times. She died at the age of ninety-one years.

Vol. 1, p. 234, *Med. Chi. Transactions*, is a case reported where a fœtus grew to full term in the abdomen of a little boy, producing death at the end of ten months.

Vol. 6, p. 124, a case is reported of a fœtus developing in the abdomen of a little girl, causing death at the age of two and a half years.

The variety of one of these cases, although relieved at the end of fifteen months by the operation of gastrotomy, was not satisfactorily determined. Other cases it would be difficult to assign to any of the described forms of extra-uterine gestation. The two cases of gestation within the sacs of inguinal hernia are of this character, although the manner in which the fecundated ovule reached the situations in which they were developed may be an interesting inquiry. It might be doubted whether the case of reputed tubal pregnancy said to have been successfully removed by abortion, was fallopian, or any other form of extra-uterine gestation.

Not less instructive than the cases of extra-uterine pregnancies are the two cases of intra-uterine, in which the fœtuses escaped through the parietes of the uterus at full term, and remained in the abdomen, one for five, the other for fifty-four years, the women in the mean time becoming again pregnant; nor the case of regu-

lar uterine gestation in which the child was retained within the cavity of the uterus for eleven years.

The case in which a fœtus was found in the abdomen of a small boy, producing death at the end of ten months, and that in the abdomen of a little girl who died at the age of two and a half years, do not, of course, belong to any of the species named. These have been classed among the monstrosities, and suggest the subject of abdominal inclusion. Other cases of a similar character, containing within the abdomen a fœtus, or the rudiments of one, are recorded. Among them, one in the abdomen of a female child, in Kentucky, two years and nine months old; one in a child in Tompkins county, New York, four years of age; one in France, in a girl aged fourteen years; one in a boy thirteen years old; and one in a boy sixteen years of age. A case is reported in which a fœtus was found in the scrotum of a man, and another in which the rudiments of a fœtus were extracted from attachments to the right testicle of an adult aged twenty-seven years.

Of the distinctly classified cases of extra-uterine fœtation collected by Dr. Hadlock, there are but three of the ovarian variety, and these were fatal.

Six cases of interstitial pregnancies are mentioned by him. Five died from rupture and hemorrhage, and one from an operation by Cæsarian section.

Probably from difficulty of expansion in the fallopian tube, the cyst in a tubal conception generally bursts previous to the fourth month, the patient dying of internal hemorrhage. This list furnishes three cases, including one of supposed tubal pregnancy, of longer retention of the fœtuses and ultimate recovery of the mothers. One recovered under the operation of gastrotomy; in the others, the development of the child progressed to full term, when it became stationary, one of the women having three subsequent pregnancies and births without any unusual difficulty. Of the twenty-three other cases cited, one died from apparent exhaustion, seventeen from rupture of the sac and hemorrhage, and in five the cause of death is not mentioned.

Fatal cases of abdominal pregnancy are less frequent than of any other form of extra-uterine gestation. This is owing, no doubt, to the extent of the abdominal cavity and the great mobility of its viscera. These conditions favor a more protracted development of the fœtus and, after its death, are more favorable either to



its expulsion by suppuration and ulceration, or its formation into a solid tumor that may remain, with little inconvenience, for an indefinite period.

Of twenty-seven cases of abdominal fœtation referred to, nine, or one-third of the whole number, proved fatal. One died from apparent exhaustion four months after conception; one from inflammation of the abdominal viscera, one year after; one from an abscess formed in the side; one at full term, after incision of the posterior wall of the vagina; one from an operation by abdominal section at eight months' gestation; one at three and one at five months from rupture and hemorrhage; one from diarrhœa and fever; and one at two months, cause not assigned. Eighteen recovered. Of these there were eight recoveries from operations and ten from the efforts of nature in forming abscesses or fissures and expelling the fœtal remains, or converting them into inoffensive tumors. In one instance the tumor formed from extra-uterine gestation was retained for nearly three years (thirty-three months), in three for four years, in one for six, in one for ten, in one for twelve, in one for thirteen, in one for fifteen, in one for thirty-seven, in one for forty, in one for fifty-two, and in one for fifty-four years. Four of these were extracted by operation after they had been retained for from four to ten years. In two of the others the fœtus came away by the process of ulceration in the third and sixth year respectively. The other seven were retained to the end of a very long life. In three cases the women had two births each while carrying the extra fœtus, one woman had three births and one had twins.

The collection of Dr. Hadlock not only presents examples of every form, but of every stage of extra-uterine pregnancy, from a few weeks' gestation to more than half a century's retention of the fœtal tumor. It furnishes, likewise, instances of all the various modes of termination. We have death from apparent exhaustion, from inflammation, from rupture and hemorrhage from putrefaction and abscess, and from different kinds of operations. We have also recoveries from suppuration and ulceration, from various operations, and from the formation of the cyst and its contents into a solid tumor remaining within the abdomen, without material injury to the patient, to the end of her natural life.

We have given, in this report, the various forms of abdominal gestation, the general symptoms, and the results of various methods of treatment, and of no treatment at all. Now how shall we

diagnose a case of extra-uterine pregnancy? And when satisfied that the case is extra-uterine, how shall we determine whether it is ovarian, interstitial, tubal or abdominal? The general symptoms being those of regular pregnancy it is difficult, if not impossible, to make a correct diagnosis from them alone, at least until the tumor is perceptible by inspection, palpation and percussio of the abdomen, or by the vaginal touch. This period is often too late to be of benefit to the patient, as death not unfrequently occurs before that time. Authors generally agree that, in its early stages, it is exceedingly difficult to recognize an extra-uterine conception. Dr. Robert Lee saw three cases of the tubal variety in which there were no grounds to suspect that the fœtus was not contained within the uterus until the acute pain which accompanied the rupture and the sudden death which followed it, indicated the nature of the difficulty. Particular signs have, however, been given to recognize the existence and detect some of the varieties of extra-uterine gestation, even in some of its earlier stages. Severe pain attributed by some to the distention of the narrow parts in which the ovule is confined, and by others to the action of the uterus itself, is said to be a constant attendant. Cazeaux mentions the appearance of abdominal pains resembling those of the uterus soon after conception, and the occurrence at times of a constant, fixed, circumscribed one in the pelvis, groin, or umbilicus. He also gives as an occasional symptom an inability of the woman to lie upon one side, and observes that the pains which set in at or near the full term of gestation, are apt to recur at varied intervals after the death of the child.

In the latter stages the diagnosis is more easy. Sometimes the vacuity of the uterus may be ascertained, revealing the fact that the existing tumor is external to that organ. Occasionally the limbs of the child can be traced through the abdominal parietes. At other times when the tumor occupies the pelvic cavity, compressing or displacing the organs in that part of the body, a hand or other portion of the fœtus may be felt through the walls of the vagina.

After the existence of extra-uterine pregnancy is recognized it is not always easy to determine its variety. Dr. Ryan, in his *Manual of Midwifery*, declares it to be the opinion of all obstetric writers that it is impossible to distinguish the form of extra-uterine fœtation at the second or third month. Dr. Rogers, of New York, on the other hand, believes that the tubal form can be

almost certainly diagnosticated as early as the fourth or sixth week. About that time, he says, in the tubal variety, "there appears paroxysms of hypogastric colicky pains usually referred to right or left iliac region, recurring at varying intervals, usually attended by nausea, a feeling of debility, torpidity of the bowels and, occasionally, vesical and rectal tenesmus. In a great per centage of the cases this pain is followed or accompanied by a sanguinolent, clotty, and shreddy discharge from the uterus, which, when present, is a sign of great significance. It is usually regarded as a reappearance of the menses or an approaching miscarriage. The uterus is early appreciably enlarged, and there is a marked tenderness over the iliac region corresponding to the pain. If the foetal cyst be ovarian or tubo-ovarian the colic pains are less certain to be present, but the remaining signs will be the same."

In the more advanced periods of gestation the recognition of the variety is not always unattended with difficulty. Perhaps the abdominal is more readily detected than the other forms from its superficial situation, and because in some instances the tumor can be recognized as distinct from the uterus. The other forms, however, are connected with this organ and can not always be easily distinguished from it.

After an accurate diagnosis has been made what should be the treatment? Can any thing be done to ward off the danger of rupture of the sac and consequent internal hemorrhage so frequent and so fatal in these cases? Blood letting has been recommended for the purpose of causing the death of the foetus and lessening the determination of blood to the parts in which it is located. It might, not unreasonably, be inferred that the early death of the embryo would render it easier for nature to convert the cyst and its contents into a harmless tumor. But the means recommended do not appear to have been very successful in accomplishing that end. Nor do we find that any other constitutional treatment has been more effectual. What then should then be done? Should we simply watch the case and prescribe for the indications as they arise, restraining pains when they occur with a view to prevent rupture, preparing the patient for and sustaining her through the exhausting process of putrefaction and ulceration, or hoping for the death of the foetus, the absorption of the amniotic fluid and the conversion of the tumor into a comparatively inoffensive body. Dr. R. Ryan thinks that the woman may recover in a majority of



instances by this course. In this, however, he is not sustained by other authorities. Out of sixty-four cases cited by Dr. Hadlock, but twenty-two recovered; and of these, twelve only are reported as having recovered through the efforts of nature. If the statement is intended to apply only to abdominal pregnancy it would be more plausible. For reasons already indicated these cases are less liable to rupture than tubal, and the recoveries from the efforts of nature are consequently greater in proportion to the number. Of twenty-seven such cases mentioned above there were eighteen recoveries; and of these, ten recovered without any treatment, at least other than palliative. And there is reason to believe that most of the others had so far recovered, before the means resorted to for the relief of the patients were instituted, as to present no greater danger than might arise from different pathological tumors within the abdominal cavity—that either an innocuous mass had been formed, or the process of suppuration had commenced. There can be no doubt, therefore, that in many instances of the abdominal form nature can protect herself. The same may, perhaps, be said of the ovarian, and to some extent of the interstitial. Not so, however, of the tubal. Of twenty-three cases collected by Dr. Hadlock there were but two recoveries effected by nature.

What should be done in this form of pregnancy? And what in the other forms named so as to reduce the mortality in extra-uterine gestation? Should an operation be resorted to and the child extracted from its unnatural position in the mother? If an operation be determined upon at what time should it be performed? At an early or late stage of gestation? Before or after the death of the child? Before or after nature has made an effort to expel the fetus? And should it be performed through the abdominal parietes, the vagina, or the rectum?

These are questions upon which a great variety of opinions have existed. The impossibility of guarding against rupture, and overcoming the consequences of extravasation of blood and other fluids would seem to favor a resort to the knife. Some writers oppose its use altogether in particular forms of extra-uterine gestation, some recommend it only in exceedingly dangerous cases, and some advocate its employment in all well ascertained cases of extra-uterine gestation. Of fifty-one operations collected by Dr. Campbell, thirty-eight recovered and thirteen died. These results would seem to warrant the performance of an operation. But when? The great difficulty in diagnosis would forbid an operation in many,

if not all cases, at a very early period. Most of the deaths from rupture referred to in this report occurred before the fourth month, some as early as the eighth week of gestation, when an operation could scarcely be made available. And if it could, Cazeaux and Adams consider it as dangerous as the dreaded rupture. Dr. Ramsbotham seems to favor operations in undoubted cases of extra-uterine gestation. Dr. Rogers recommends an early resort to the operation of gastrotomy. He maintains that this operation is not only easily performed, but that it offers the only means of preserving the life of the patient where death would otherwise be almost inevitable. Dr. Ryan opposes gastrotomy in ovarian and tubal pregnancies, and thinks it should be employed in the abdominal form only after the seventh month when there is no doubt about the life of the child. When it is remembered that this is the form most likely to be remedied by nature, it is not easy to understand his objection to gastrotomy in the former varieties, and his justification of it in the latter. Dr. Lee does not think that this operation should ever be performed with a view to extracting the child alive. Dr. Campbell's collected cases show that of nine women operated on before the death of the fœtus or soon afterwards all died, while in twelve cases operated on after suppuration had set in and nature had begun an effort to rid herself of the offending mass but two died. And we have the authority of Ramsbotham for saying that in the greater number of operations by gastrotomy an ulcer had been previously formed, so that the operation merely consisted in dilating or enlarging the aperture which had been commenced by nature.

From what has been said we may not unreasonably conclude: 1st, that it is exceedingly doubtful, whether any reliable internal treatment can be instituted to arrest rupture, hemorrhage and consequent death in these cases; 2d, that most, if not all the recorded cases of recovery have been either from the efforts of nature, or from operations; 3d, that operations are seldom or never available in the earlier stages of extra-uterine gestation; 4th, that the safety of the mother requires the performance of the operation after the death of the fœtus; 5th, that the success of the operation is more probable after nature has set up an effort by suppuration, to rid itself of the incumbrance.

Now what should be the form of operation? Three modes have been recommended: gastrotomy, vaginal incision, and incision through the rectum. Instances of the successful performance

of all these different methods are referred to above. Each has its peculiar advantages. The rectal incision has not been often resorted to. It may be employed where the vulva is obliterated, or where some impediment exists to an operation through the vaginal walls. The vaginal incision is adapted to the extraction of the fetus when situated low down in the pelvis, so that some portion of it can be felt through the folds of the vagina. Gastrotomy may be performed when it is situated high up in the abdominal cavity.

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*Art. II.—A Case of Aortic Aneurism, with Sphygmograms.*

By WILLIAM CARSON, M. D., Physician to the Good Samaritan Hospital, and Pathologist to the Cincinnati Hospital.

We are indebted to Dr. Frank Brunning, of this city, for the following history, and also for opportunities of observing the case while under his charge:

Joseph Meyer, German; æt. fifty; locksmith; full faced, and good muscular development; states that, while living in Germany, he always enjoyed excellent health. Since he came to this country—seventeen years ago—has led a roving life, traveling over the greater part of the United States, employed in different capacities and exposed to numerous privations and hardships. Has had syphilis several times, but never any secondary symptoms. He was afflicted with rheumatism in the spring of 1863, which confined him to his room several weeks; has suffered several times since that with subacute attacks. His father died very suddenly of heart disease, and one of his brothers had heart disease, but was accidentally killed on the railroad.

Nine weeks before consulting me—July 1, 1869—he says he went to bed as usual, perfectly well, but awoke in the night in great distress, suffering with dyspnea, and feeling as though he was approaching dissolution. He called loudly for help, but, being in a boarding-house, nobody came to his assistance until he got out of bed and went into the passage, when he succeeded in making some of the inmates hear. When they got to his room, he was lying across his bed writhing with pain, his face cold and livid and bathed in a profuse perspiration. His extremities were



cold. This condition lasted for some fifteen minutes, when the pain somewhat abated. It was then he first perceived the pulsation on the right side of his chest. He paid, however, no particular attention to it for some weeks, until the pain became so severe that he was obliged to quit work and seek medical advice. He fell at first into the hands of a hydropathist, who gave him a daily bath, and also advised him to take as much exercise as possible; then into the hands of a "galvanic doctor," who applied a battery twice daily. These increased his difficulty, when he abandoned their treatment and came to Cincinnati.

On physical examination, we found a pulsating tumor of about three and a half inches diameter, the most prominent point of pulsation being about two inches and a half to the right of the sternum, and between the second and third ribs. There was a movement of expansion as well as of pulsation. A slight pressure upon the tumor produced considerable pain, but no thrill was felt. The recumbent posture produced no change. Percussion showed dullness extending slightly beyond the defined borders of the tumor—a clear sound near the sternum, and then, as you moved toward the precordial region, the ordinary amount of precordial dullness. The apex beat was in the fifth intercostal space, the impulse being rather feeble than otherwise. By auscultation, we found that the heart sounds occupied their normal areas, with diminution of intensity toward the right border of sternum; and a feeble systolic murmur, loudest at the apex and not heard at the base or over the sternum. Beginning about the right border of sternum, and on a level with the tumor, we heard two sounds, apparently of cardiac origin—the first dull, the second sharp, but much louder than the sounds heard at the precordial space. These had their greatest intensity over the point of greatest pulsation, and diminished toward the left side of the sternum. A bruit was heard towards the right of the tumor, and about the fourth rib. It was rather soft, and was not heard immediately over the tumor. It was also audible about two inches and a half above the inferior angle of the scapula, in the intra-scapula space on the right side.

With reference to the respiratory function, there was no perceptible encroachment upon the respiratory space, except to a very limited amount in the immediate neighborhood of the pulsating mass, where there was dullness and absence of respiratory murmur. Otherwise, the respiration was symmetrical on both sides. Active movement, particularly up-stairs, was difficult. He had no cough

or expectoration. There was perceptible, usually, some difference in the radial pulses, the right being the weaker. The right pupil is occasionally smaller than the left. He has had, at times, pain upon swallowing solid food. Pain has been more usually and more severely felt in the back, to the right of the spine, in the neighborhood of the bruit, than over the tumor itself. It is increased in front by leaning forward, and diminished in the rear by leaning backward. He feels it frequently running out to the right shoulder and down the right arm.

The most striking phenomenon of this case is obviously the abnormal pulsation to the right of the sternum. So far as the principal auscultatory signs were concerned, it might have produced the impression of cardiac pulsations, for the first and second sound of the heart were closely simulated. We excluded the supposition of a displaced heart for the following reasons: *First*. There was no history of previous disease that was likely to produce change of position of the heart, such as pleuritis and consequent effusion in the left pleura; or of solid growth in the left chest, thrusting the heart to the right; or of any disease on the right side of the thorax by which pleuritic adhesions and contractions, sufficient to draw the heart towards the right, were produced. The phenomena of pneumothorax, which may displace the heart, were absent. Moreover, the position of the pulsation was unusual, even for a displaced heart. *Second*. The apex beat was in its normal position, the percussion sound between the precordial and the tumor dullness was resonant, and the cardiac sounds were heard in normal position and extent. These facts, together with others, suggested the idea of two distinct centers of pulsation, which was inconsistent with cardiac displacement.

The hypothesis that the pulsation might be due to an enlarged and superficial right auricle, next presented itself. We published, a short time since, a case of supposed aneurism which was really due to this cause. We think it more worthy of consideration than is usually given to it. It has been a source of error in a number of instances, and yet is not prominently mentioned in the diagnosis of aortic aneurisms. Besides the cases alluded to in our article, we have since met with a number of others. The signs common to both are pulsation, thrill and bruit. One or more of these may be absent in any given case. In aneurism, with the visible pulsation, there is more apt to be tumor. Hypertrophy of the heart is

more or less common to both. Between it, as connected with aneurism, and that with the prominent pulsating auricle, it may be absent in the one, but, so far as we know, never in the other. In one it is an effect, and in the other an antecedent. Bruit and thrill are unreliable signs of either. In the reported case we had a very loud bruit, which *post-mortem* showed to be due to two causes—a constricted aortic orifice, and pressure of enlarged glands upon the aorta. In the present instance, we have clearer evidence of two centers of pulsation, and little or no cardiac hypertrophy. One pulsation at the right second intercostal space, two or three inches to the right of the sternum, and another below the nipple, would imply, if both dependent on the same mechanism, a very enlarged heart. We reject this hypothesis, then, on the evidences of two different centers of pulsation, and on the existence of a double sound which is unusually intense, which seems to originate at that spot, beyond the limits of the heart, and which is not a transmitted sound.

If it be extra-cardiac, is it extra-arterial, determined by a tumor over or underlying the aorta? The family history, which raises a presumption of either cardiac or arterial lesion (the former of which we have already excluded); the history of the case, as the reported sudden appearance of the pulsation, which may be supposed to have been produced by the blood-current acting on a degenerated atheromatous aorta; the healthy appearance of the man; the absence of co-existing tumor elsewhere; and of many symptoms of pressure which, the tumors being equal, would probably be greater with a solid growth than with a yielding aneurism; the lateral expansive and non-projectile pulsation, and the double sounds, do not comport with this supposition.

Besides the negative symptoms and signs excluding all other hypothesis, we have two of a positive character which point to the arterial origin of this tumor. They are: *First*. The evidence in favor of two distinct centers of pulsation; *Second*. The existence of a double sound, or two sounds, over the tumor, simulating very much the natural sounds of the heart, but not transmitted from that organ.

We have thus reviewed most of the ordinary grounds of the diagnosis of aneurisms, for the purpose of bringing into juxtaposition with them some sphygmographic tracings made upon this man. The first sphygmogram is one of a healthy pulse, which we present for the purpose of comparison:

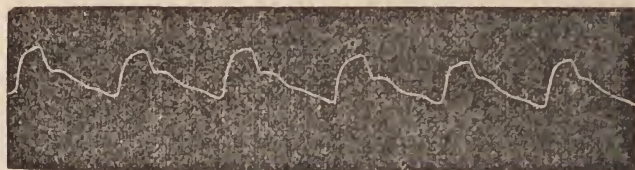




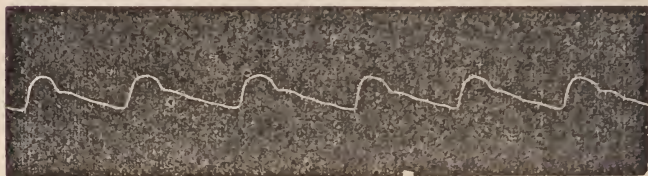
No. 1.—Healthy tracing. Spring pressure, 150 grammes.

As to the points for observation in any tracing, the line of ascent, the summit, the descent, and the aortic notch or the dicrotism, we have here a fair sample of a healthy pulse. The whole indicates healthy arterial tension and cardiac force. It is in marked contrast to some of the sphygmograms which follow. It was taken from the pulse of Dr. A. M. Brown, of this city, and the pressure indicated about 150 grammes.

In our account of the case, we speak of the inequality of the radial pulses as perceived in our ordinary examinations. Nos. 2 and 3 confirm our statement.



No. 2.—Left radial. Pressure, 120 grammes.



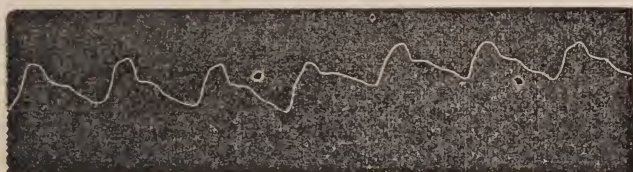
No. 3.—Right radial. Pressure, 120 grammes.

The left radial tracing has decidedly more amplitude than that of the right. The curved line of ascent, the planiform summit in some of the pulsations, the somewhat sudden descent, and the marked dicrotism contrast with these points in No. 1. No. 3 has less amplitude and less dicrotism, but the rounded summit indicates, as No. 2 does, a difficult or somewhat labored ventricular contraction. These traces, besides showing an inequality of radial pulsation, prove that there was some obstruction to the uniform and easy transit of the blood, and hence the curved line of ascent and the rounded or planiform summit in both the figures. Senile

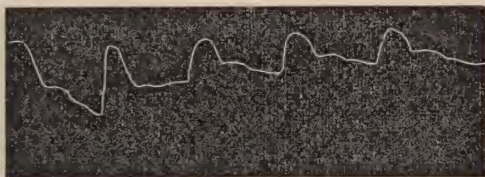
degeneration of arteries will produce more or less of the same characters. We have found, in fifteen tracings, very little deviation, except under peculiar conditions, from the figures submitted above. Marey remarks:\*

"Sometimes the graphic tracings taken from the two radials present nearly a complete likeness; at other times the most striking differences are produced. All the variations that the pulse undergoes should be explained by the anatomical conditions of the tumor; its volume; its elasticity; its position in relation to the arterial trunks which emanate from the aorta; the diameter of its orifice of communication; the direction of this orifice in relation to the blood current which escapes from the heart; all these influences are combined in a thousand ways."

Nos. 4 and 5 are intended to show the effect that compression of the aneurismal tumor has upon the tracing:



No. 4.—Right radial, with pressure by hand over tumor during last half of tracing.



No. 5.—Right radial, with similar pressure in last part of tracing, showing elevation of tracing and diminished amplitude from increased arterial tension.

The tumor was compressed during the last half of the tracing, with the effect of diminishing its amplitude and elevating the summit line. It is an important fact in the diagnosis, as compression of an artery by a solid tumor has the effect of lowering tension and lowering the line of the tracing. Marey† explains this in the following way:

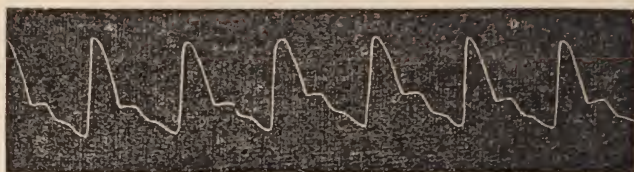
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\**Physiologie Medicale de la Circulation du Sang*, p. 455.

†P. 460, *op. cit.*

"In compressing the aneurism a part of its contents is expelled into the arteries, and the tension is elevated; hence, the more elevated line of the trace. When the compression ceases, arterial tension is lowered in consequence of the reflux of the blood into the sac. Note here that the amplitude of the pulse is likewise much modified; it is diminished when the tension is strong in consequence of the compression of the aneurism; it is increased when the tension is feebler. This modification, that compression of aneurismal tumors produces, can be made of great use in diagnosis, whenever a tumor, moved by the pulsations of an artery, simulates a true aneurism. The compression of a solid tumor can only act by compressing the subjacent artery in such a way as to diminish the force of the pulse, and thereby lowering the line of the tracing. When this compression is withheld, if the pulsations resume their force, the summit of the trace is elevated. There is then opposition between the effects that compression of an aneurism produces and those which result from a solid tumor reposing upon an artery."

No. 6 is a tracing taken from the same man, and is subjoined to show that his circulation was easily and greatly modified in conditions of fatigue and excitement. It exhibits largely a diminished arterial tension, an increased diastolic movement, and a deepening of the aortic notch.



No. 6.—Taken under conditions of fatigue and excitement, with some expression of pain about tumor.

We appear to have here, then, important aid in the diagnosis of aneurisms of the aorta, as the result of the examination of this case by the ordinary means is confirmed by the sphygmographic tracings. They also afford a presumption of degeneration of vessels, as the forms correspond with those met with in senile decay.

There was no time for the use of remedies before the patient left.

We again return thanks to Dr. Brunning for the opportunity of making our observations.



The instrument used is the English modification of Marey's, whereby its delicacy and facility of manipulation are much increased.

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*Art. III.---Hydrocele of the Neck.*

By GEO. C. BLACKMAN, M. D., Prof. of Surgery in the Medical College of Ohio; Surgeon to the Cincinnati Hospital, and to the Good Samaritan Hospital, Cincinnati.

C. M., æt. 7. When about ten or twelve months old, his mother first discovered a little fullness above the clavicle, and near the internal edge of the trapezius muscle. Iodine was applied freely, and it was poulticed for several weeks, but it continued to increase in size until it reached that of a large orange, in September, 1865, at which time we first saw him. The tumor was tense and transparent. With a tenotomy knife we punctured it at several points, and after the fluid contents had escaped, we found that there was an indurated mass at the base about equal to a large hickory-nut. A truss was fitted so as to keep up compression over this mass, and a lotion of Iodide of Ammonium was applied several times in the day. The patient returned after a short time to his home in Marion, O., and in the course of a few months the tumor became larger than ever. In March, 1866, it was again punctured by Dr. Sweeny, but it did not collapse completely. In March, 1867, the patient was again brought to the city, at which time a photograph was taken, and the appearance may be seen by examining the wood cut on following page.

As the treatment by repeated tapplings and compression had been faithfully tried, together with lotions of Iodine and Iodide of Ammonium, it became evident that some other proceeding was required. After considering the various methods which have been employed in these cases, injection of Iodine, free incision with tent the seton, and extirpation, we decided to try the seton. About the first of April, a single thread of fine silk was passed through the tumor by means of a long needle, and by the side of this seton a considerable portion of the fluid contents of the cyst escaped. In the course of forty-eight hours, the sac began to inflame, and in about five days after the introduction of the seton, the tumor had increased to nearly double its size at the time of the opera-

tion, the integuments were at certain points of a deep red, and at others of a livid color, and there was also great constitutional irritation, so much, indeed, as at one time to excite serious apprehension for the result. The seton was withdrawn on the third day, and yet suppuration occurred so as to render it necessary to give



exit to the matter by incisions. After the tenth day the whole condition of the patient began rapidly to improve, so that he was able to leave for home about the middle of April, in good health, and with no traces of the tumor, except a small indurated mass, and which after a few months completely disappeared. At the present date, Dec. 27, 1869, the neck remains perfectly natural.

In two cases, the one an adult, the other just mentioned, the seton in our practice has given rise to such difficulty in deglutition and respiration, that, in connection with the severe constitutional irritation accompanying, we have felt much anxiety for the result. Mr. Curling has reported a case in the *London Lancet*, Dec. 14, 1867, in which the above symptoms were developed in consequence of the injection of Iodine, and in which the symptoms were only relieved by an incision into the cyst. In proof that suppuration in a cyst of so large a size, and near so many important structures, is not altogether free from danger, he refers to a preparation in the museum of St. Bartholomew's Hospital, of a large cyst of the thyroid gland, which inflamed and enlarged rapidly after tapping, and destroyed the patient by suffocation. The cyst had burst and discharged its contents into the pharynx and larynx. He alludes to a similar case in the practice of Gooch. Mr. Curling expresses the opinion that the seton has the advantage over injections, viz: that it is free from the risk attending the rapid enlargement of the cyst, and confinement of matter, which proved fatal in the cases above mentioned, as there is always an outlet for the escape of fluids. Yet, where a single thread is used, as in our own case, the purulent fluid could not escape, and an incision was made with the knife. In another case we were compelled to resort to the same proceeding.

(TO BE CONTINUED.)

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*The Scientific American*, is well-known as one of the foremost publications in its special department. All persons interested in mechanics, inventions, architecture, agriculture, and all such interests should take it. The price is only \$3 a year, but when the publishers request us to advertise their extended prospectus to the amount of \$10, for the privilege of an exchange, "count us out."

*The late Dr. John W. Francis*, of New York, was one of the remarkable men of the age. The publishers of the *New York Medical Journal*, and the *Psychological Journal*, have issued a splendid engraving of Dr. Francis, price \$3, but sent as a premium to all new subscribers to either of those journals.



## Translations.

*The Sneezing Spasm and its Relations to Hemicrania, Bronchial Asthma, and Hay-fever.*

By Dr. RUD. H. FERBER, of Hamburg.

(Archiv der Heilkunde, 6 Heft, September, 1869. Reported in Med.-Chir. Bundschaw, October, 1869. Wier.)

Translated by Dr. Epstein, 40 Everett street, Cincinnati.

The author having had a very suggestive case of this character under treatment, was led to make it an object of thorough study and research, the results of which are in the following article.

The sneezing spasm is not an idiopathic malady, but an accompanying phenomenon of various other anomalies, which certain disturbances in the nervous system may produce. This complexity of symptoms with which the sneezing spasm associates itself, shows in its occurrence and manifestations a striking similarity with hemicrania, bronchial asthma, and hay-fever. There is, hence, a strong relationship between these affections themselves. They are severally referable to a certain disturbance in the nervous system; and the similarity of their phenomena justifies also the conclusion that the locality of that disturbance is to be sought for in one and the same nervous district. Of one of these affections, bronchial asthma, it has been experimentally shown that an irritation of the vagus is capable of producing phenomena similar to it. (Cruveilhier, Romberg, Krimer.) Salter regards asthma as an effect of the contraction of the bronchial muscular fibers, caused by an irritation of the vagus. Czernak and Virchow have expressed a similar opinion before Salter, although only in reference to certain particular cases of asthma. (*Deutsche Klinik*, 1860, p. 463.) In the third decennium of this century, when so much was talked about the inflammation of the nervous vagus, we find in the observations then made that prominence is given to the symptoms of thoracic oppression and respiratory difficulties. (Von Swan, Kurtz, and others.) Hooping-cough, too, is regarded by most authors as a neurosis of the vagus, and

the sneezing spasm can, as we have seen,\* act vicariously for it, so it does join itself not infrequently to asthmatic difficulties generally, and a therapeutical application to the gastric branch of the vagus is said to be beneficial in both these affections.

Now, what are the nervous provinces which suffer in the other affections in whose company the sneezing spasm is apt to occur? The group of symptoms from the stomach and fauces, as well as the more rarely observed respiratory difficulties, which we meet with in hemicrania, are doubtless referable to the vagus. Czer-nak, who tried the experiment of irritating his own right vagus, observed the following phenomena in himself: Retardation of the pulse; thoracic oppression; pain in the right side of the face, especially in the right eye; dizziness and fainting. (Prager, *Vierteljahrsschrift*, 1868, p. 30.) It is true, Czernak does not attempt to refer that facial and ocular pain directly to the vagus; still, the fact remains very peculiar, and would seem to afford some explanation of that group of facial symptoms with which we meet in hemicrania. If the essential phenomena of a disease can be referred to a particular nerve, why should we not refer the accompanying phenomena also to that same nerve, since the experimental irritation of the latter gives us such very analogous phenomena? Allowing the ganglia of the sympathetic in the neck to have their share in those phenomena, still does the vagus, after all, appear to be the main source of suffering in hemicrania and asthma. The analogies observable between asthma and the sneezing spasm, clearly justifies the reference of the latter to irritation of the vagus, and the occurrence of that spasm in hemicrania also, as well as the various existing analogies, which need not be repeated, between those two or between all the three affections, support still further our view of the subject. It is surprising, however, that in the above-mentioned cases of "inflammation of the vagus," no notice whatever is taken of any sneezing phenomena. It is possible that such infrequent attacks were not regarded as of importance by either patient or even physician.

But the process of sneezing itself seems to speak in favor of our assumption. If the vagus does really produce that contraction of the muscular fibers of the finest bronchial branches, which is assumed to take place in asthma, then in sneezing also, which is a

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\*The author refers here, and subsequently, too, to a part of his article not quoted in the *Med.-Chir. Bundschaw*.—[TRANS.]

forcible expulsion of the air from the lungs, we must assume an equal contraction of the same fibers under the influences of the same nerve. In the act of blowing the nose, we indeed compress the lungs by means of the thoracic muscles and the diaphragm, but we are altogether unable to produce that degree of compression on which the phenomena of sneezing depends. I rather believe that in asthma we may assume a continuous contraction (tonic spasm) of the bronchial muscular fibers, while in the sneezing spasm we may assume, on the contrary, an alternate contraction and relaxation (clonic spasm) of the same fibers.

We all know that peculiar sense of comfort which is apt to follow an occasional act of sneezing. It is also known that sneezing is apt to re-excite various functions in an exhausted state of the body, as, for instance, in parturition. The reason of these facts is, very likely, that the various gaseous products of decomposition, stagnating in the alveoli of the lungs, are suddenly expelled by that forcible act of sneezing, and are replaced by oxygen-rich air. Still, when the same act is repeated at too short intervals, as in the sneezing spasm, then suffocatory phenomena may ensue, as in whooping-cough.

In the cases enumerated above, we noticed specially certain anomalies of the circulation in the lower part of the pelvis, as phenomena accompanying the affections now under consideration. But experience teaches us, furthermore, that the phenomena may also be of primary disease, and be the very cause, even, of the same affections, which at other times they merely accompany. It may, indeed, be asked: Whether these anomalies in the venous part of the circulation are not the sole causes of the affections in question? Yet this can not be answered at present. An assumption to this effect becomes only probable from the fact that the typical behavior of those nervous disturbances coincide with the typical behavior of those circulatory anomalies.

Experience shows that hemicrania and asthma are more frequent during those seasons of the year when hemorrhages and congestive complaints are more prevalent. In the warmer season there is observably a greater tendency to reflex actions and spasmodic affections, especially in the commencement of the season, the nervous system being then generally more irritable. In the spring of the year there is an acceleration in the metamorphosis of matter, and our entire being shows a change, for which we can find no explanation, or no exclusive one, in external circumstances.



Aside from the regular recurrence of the above-named affections at certain seasons of the year, there is also a regular daily recurrence of certain phenomena in the group of symptoms of most of these cases during their course. The sneezing spasm, which we have here principally in view, recurs chiefly in the morning, immediately after awakening, or on leaving the bed and during dressing. The teachings of physiology may afford us an explanation for this behavior of the affection. It is well known that the vegetative functions show a remarkably increased activity immediately after the end of normal sleep; thus we have increased frequency of the pulse, and a higher bodily temperature, from the first wakening in the morning till about 10 o'clock A. M. During the preceding hours of sleep the pulse is smaller, the arterial tension less, the circulation occupies considerably more time, hence a still greater fullness in the venous compared with the arterial system during sleep than during the waking hours; hence, also, an abnormally dilated and overfilled stream in the lower part of the pelvis. The maximum of this state is probably reached shortly before awakening. In the very first case which I cited, the awakening of the patient occurred repeatedly with an attack of sneezing spasms. But it is also to be remembered that the change of posture from the horizontal during many hours to the erect, is also a well-known cause for that difference in the circulation. Now, if the oxydation of the blood generally proceeds more slowly during sleep, and the venous system being gusually overfilled, then, no doubt, that when in addition to this the veins become abnormally dilated, and thus the circulation still more impeded, that the balancing of it becomes so much the more difficult. The activity of the lungs after awakening is an increased one normally, and their exertion will be the greater in proportion to the hindrances they will have to overcome. But if the activity of any organ is overtaxed, its disposition to become diseased is at the same time also increased. Hence, it is not to be wondered at that the disturbances in the respiratory organs, such as the sneezing spasm is, should take place at such times, when their activity is normally increased, as during the morning hours. The sneezing spasm is, in fact, nothing else than an ordinary restorative effort of nature, increased in this case to an extraordinary extent, till it becomes a disease; it is an effort of nature to expel forcibly the stagnating



carbonic acid gas from the pulmonary alveoli, and give room for the oxygen air.

It is possible that the air in the pulmonary alveoli, which is surcharged with excretory products, produces an irritation in the sensitive elements of the vagus, which transfer it to the motor fibers of it, and thus a contraction of the muscular fibers of the bronchia is the result. For, do we not find that dietary errors produce similar consequences in hemicrania and asthma? The latter is very often consequent upon the ingestion of alcoholics. Salter already admitted the possibility of the vagus being influenced through the blood. The excretion of the superfluous carbonic acid from the blood is done by the lungs, whose alveoli are surcharged with it, and an action thence on the nervous elements is not unlikely. I would refer here to the above-cited cases from Morgagni, where the sneezing spasm appeared in company with asthma in habitual drunkards. It is very likely that the inhalation of certain smelling substances (grass blossoms, ipecac, tobacco, etc.) operates as a direct mechanical irritation.

We may well assume that repeated irritation of the sensitive elements of a nerve extending to the motory elements, does at last affect the conductive fibers of that nerve. Hence the various facial and gastric phenomena which accompany the sneezing spasm and the asthma.

[TO BE CONTINUED.]

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### *Some Novelties in Subcutaneous Medicine.*

Translated by Jas. T. Whittaker, M.D., Cincinnati.

#### *The Subcutaneous Aspirator.*

M. le Docteur G. Deulafoy presented the following note on a novel instrument of his invention to the Imperial Academy of Medicine, at its session November 2, 1869, which is to render service both as a means of diagnosis and of treatment. The instrument, a plate of which is represented in the report, consists of an ordinary glass hypodermic syringe, provided with an

additional tube at the side and at right angles to the distal extremity, somewhat after the manner of the tubes of a stomach-pump; both tubes are provided with stopcocks, similar in arrangement to the instrument mentioned, so that fluid may be drawn from the body and ejected from the side tube, or taken up by the side tube and injected at the tube of insertion. Tubes of various lengths may be adjusted so that any required depth may be reached. A glance at the cut would reveal its exceeding simplicity better than any detail of description can. It is well known what difficulty sometimes accompanies the recognition of collections of pus concealed under the muscles and aponeuroses of the gluteal and cervical regions, the iliac fossæ, etc., or when situated in the depths of such organs as the liver and kidney. The observer remains undecided then as to the presence or nature of a fluid which does not disclose itself for some time, either by a marked tumefaction, or by fluctuation. True, the febrile condition and the pain are indications of value in diagnosis, but how may we arrive at a certainty as to the existence and seat of the collection? How may we know whether surgical intervention be useful, urgent, or injurious? To answer these questions, which so often present themselves in practice, the ordinary exploratory trocar has been devised. But this instrument, far from fulfilling its promises, seems to have failed in its design. It corresponds in no way to the idea which gave it birth. It carries its own condemnation with it, for it is at once both too large and too small. Its caliber is voluminous; compared with the fine needles of subcutaneous injection, it may be seen how little it merits the name *capillary*, which has been given it; and yet, in spite of its relatively large diameter, it does not permit the passage of the fluid often enough, either because of its inspisitude or the occlusion of the caliber of the tube. To remedy these inconveniences, MM. Robert and Collier, our ingenious fabricants, have constructed for me long canule trocars of such size that the most delicate organs may be traversed without greater injury than from the acupuncture needles, whose perfect innocuousness is well known. This canule trocar, provided with two slits at its extremity, is introduced in search of the supposed fluid. Having been filled, it is as easily emptied by a pressure on the piston, and at once a full assurance is given of the presence, seat, and nature of the collection. The seat is determined by the direc-

tion and depth given to the canula; then a microscopic examination reveals its nature to an exactitude.\*

This means of exploration is equally applicable to cysts, hematomata, and collections of serum, pus, or urine.

So much in a diagnostic point of view. A word now as to its application in treatment.

By the aid of this instrument, articular effusions may be emptied without fear of the introduction of a single bubble of air, and without the danger of traumatism from a wound so minute. Might not an analogous treatment be applicable to the effusion of pericarditis? Experience will prove if this be not preferable to the difficult and dangerous operation of paracentesis of the cardiac envelopes. I might mention also the aspiration of urine in cases of retention, the extraction of liquid in circumscribed pleurisies, in the abscesses of congestion, etc. The evacuation of the liquid is effected by the two cocks at the end of the syringe, which are to be alternately opened and shut. Should the injection of any liquid, as Tinct. of Iodine or Alcohol, be thought necessary, it may be practiced at the same time without displacing the instrument, the maneuver requiring only a reversal of the stop-cocks.

The subcutaneous aspirator is destined also to remove gases which accumulate in such large quantities in intestinal occlusions, and which may, under circumstances, prove an obstacle to the reduction of certain hernias.

Finally, the same procedure may be of service in local depletion, the needle being plunged directly into a vein or artery, to drain and disgorge hyperæmic parts, as strangulated and turgescient hemorrhoids.

I desire to put one point in strong relief, which is exceedingly useful in the management of the instrument. When both stop-cocks are closed and the body of the pump emptied of air, the piston may be detained at its greatest height, and then adjusted to the needle, which has been previously introduced, when a simple reversal of the cock of the inserted canule permits the fluid rapidly to rise into the tube without the least movement on the part of the operator.—*Bulletin General de Therapeutique*, Nov. 15, 1869, pp. 429-431. (*To be continued.*)

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\*We have often seen the character of an ovarian tumor determined to a nicety by this microscopic examination of the contents of the exploring trocar.—[TRANS.



## Hospital Reports.

*Clinical Lecture by Professor Mendenhall, at the Cincinnati Hospital, Nov. 31, 1869.*

Reported by W. W. VINNEDGE, M. D., House Physician.

### *Puerperal Fever.*

GENTLEMEN: I propose to-day to bring to your consideration, the subject of puerperal fever, illustrated with cases occurring in the hospital within the last month. We have had seven in the obstetric ward. They have not been brought before you, because I thought moving and the excitement of bringing them before the class might be injurious. I will, therefore, content myself with reading you the notes of the cases and reviewing them. Great discrepancies of opinion exist as to what constitutes puerperal fever. It has been described under different names. Puerperal fever, peritonitis, puerperal metritis, uterine phlebitis, childbed fever, etc. Some of these names indicate opinions formed respecting its pathology, while others simply state its connection with the puerperal condition.

This disease, when it exists as an epidemic, is often terrible in its results. It is more to be feared in hospitals for lying-in women, than in private practice.

It has often been connected with hospitals for confinement, and therefore, its causes should be carefully guarded against. Every puerperal case is of great interest. Death connected with labor or from puerperal causes in woman while procreating her species, excites intense interest and sympathy. I will now read the history and treatment of a severe case, and afterward a mild one, so as to show the symptoms as developed in cases of different degrees of severity:

CASE I. Maggie D. Primipara. Delivered October 27th. Labor easy, lasting six hours. Male child at term and healthy looking. No hemorrhage.

Oct. 28. Pulse 75; tongue natural; skin moist. No difficulty in voiding urine; no pain; uterus firm; lochia free.



Oct. 30. Uniform good condition since last note; pulse 75; tongue natural; bowels opened to-day by Castor oil; lochia natural.

Oct. 31. Did not sleep so well last night; skin moist and warm; pulse 80; milk sufficient; lochia normal; no pain.

Nov. 1. Tongue, skin, milk, and lochia natural; pulse 85; no pain.

Nov. 2 and 3, inclusive. Skin, tongue, and lochia, normal. Ordered three Comp. Cathart. pills. No uterine tenderness.

Nov. 4. Some nausea; anorexia; Pulse increased, 90; bowels obstinately constipated; three Comp. Cathart. pills and an enema. composed of Ol. Ricini  $\bar{3}$ j, Ol. Terebinth  $\bar{3}$ ij, Soapsuds Oj. M. Failed to affect them. Sweating profusely.

Nov. 5. A stool during night; tongue coated, and rather red at tip; slept moderately well; vomited yesterday evening. Ordered

R.—Syr. Zingib.  $\bar{3}$ ss.

Tr. Opii. Camph.

Aqua Cinnamon aa,  $\bar{3}$ i.

Bismuth Sub. Nitr.  $\bar{3}$ ij.

M.—Signa.  $\bar{3}$ ij, every four hours.

Nov. 6 to 7, inclusive. Pulse 90; tongue coated and red; skin moist; no appetite; lochia somewhat offensive; uterine tumor large; slight chill on 7th; vagina syringed.

Nov. 8. Slept badly; headache; loss of appetite; nausea; tongue furred, white, tip red; no stool; bowels costive; ordered enema again; milk scanty; thirst.

Nov. 9. No change except pain in region of uterus; lochia offensive; uterus syringed thoroughly with warm water; blister Empt. Canth. 5x6 over region of uterus; has egg-nog

Nov. 12. Bowels opened; tongue red; pulse 120; tympanitis since 10th. Ordered

Quin. Sulph. grs. vi.

Pulv. Camphor, grs. xii.

Pulv. Opii. grs. iv.

M.—Chart. vi d. s. ter hora.

Nov. 13 to 14, A. M. Pulse 120; P. M. 130; lochia offensive; uterus large; tympanitis; uterus syringed twice daily. Ordered Sulphite of Soda grs. x every four hours, and treatment continued.

Nov. 16. Pulse, A. M. 120; P. M. 140. Brandy increased to 3iij, every two hours. Beef ess. Egg-nog and other treatment continued.

Nov. 17 to 19, inclusive. In morning pulse 112; tongue red; bowels open; tympanitic condition of abdomen improved; skin dry and hot. Catheterized on 18th; treat. cont.

Nov. 21 and 22. Pulse 120; much emaciated; great feebleness; good courage, however. Began to sweat. Opium and Camphor was discontinued, and gtt. x of Aromat. Sulph. Acid with grs. iss Quin. Sulph. Beef essence and egg nog cont.

Nov. 25. Pulse fell to 96; skin moist; tongue improved; appetite returning. Sleeps very well.

Nov. 29. Pulse 70; tongue clean; bowels open; skin moist; sleeps well.

Dec. 1. Convalescent.

CASE II. Alice W. Primipara. æt. 18. Domestic. Delivered Nov. 13. Labor easy, lasting 24 hours. No hemorrhage. Attacked eight days after confinement without any chill, with enlarged uterus; offensive lochia; hot skin; thirst; pulse 120; tympanitis very slight; milk scanty; uterine syringe gave great relief. She was treated in the usual way and did well. Sixth day from attack pulse, tongue, and skin became normal. Discharged well December 10.

In the most severe case, you will observe that on the fourth day after delivery, pulse increased five beats to the minute, previous to this it had been but 75, showing a good condition of the patient. When the pulse is 75, you may as a general rule, feel assured that all is right. She continued in pretty good condition until the 12th day, which is an unusual time after delivery for trouble to supervene. About this time, and previously, I noticed that the patients were not doing well—that hot skin, dry red tongue, and frequent pulse had become common in the ward, symptoms that reminded me of a similar character in the house last spring; more of which I will speak hereafter. While calling attention to the notes of this case, I desire to direct special attention to the importance of syringing the uterus thoroughly, at least once daily, when the lochial discharge is offensive, and if very offensive, oftener. You can not give too much attention to daily ablutions of tepid water to the uterus and vagina under these circumstances. The history of all the cases confirms what I have said of the great importance of this measure, the object of

which is mainly to prevent the absorption of putrid matter into the system. You will notice, as a prominent symptom in the first of these cases, an enlargement of the abdomen, tympanitic in character, from accumulation of gas in the intestinal canal, and which may be distinguished from effusion of liquid or enlargements of a solid character, by percussion. The tympanitic condition emitting a clear sound, while the solid and liquid enlargements will produce a dull or flat sound. The extent of the uterine enlargements may be determined both by palpation and percussion. The condition of the pulse from the beginning of the attack has been quick, varying from 100 to 140 per minute. Her position is confined to the back, with her lower extremities generally drawn up; but this position is not an invariable one. She has had, as you will observe, no well marked delirium, nor do I think delirium a very common condition in puerperal fever, except in the latter stages of bad cases; at least, it has not been so in the cases we have had. I will now present you an abstract of all the cases occurring in the ward as prepared by the house physician, and to whose close and unremitting attention, the success in treatment of these cases is largely due. The careful attention of the nurse, Mrs. Brown, was also an important element in the result.

## ABSTRACT.

Puerperal fever first appeared in the obstetric ward of the hospital, October 31. Seven patients were attacked. In four cases fever was ushered in by chill, and in the remaining three, by no well defined symptoms. In one case, the last one which occurred, only three days intervened between the time of delivery and time of attack; in another, the longest, twelve days passed before the disease appeared to be well developed. No difference observed in after course of disease, between patients attacked with chill, and those without chill. The average time of invasion, was a fraction more than the sixth day after delivery. Quick pulse uniformly present, ranging from 100 to 140. Uniform red tongue, slight headache, in two instances only. No delirium. Secretion of milk scanty; in two patients absent, and which did not return; in two others greatly diminished at onset of disease, but afterwards reappeared. Lochia offensive in every case. No diarrhea, this result probably due to treatment. In no case was uterine tenderness very great, but present, however, to some extent in all. Uterine tumor, very large, in one case only. Tympanitic condition of abdomen in



every case. Nausea and vomiting common to all in some degree or other. Urine scanty, and high colored.

In the treatment of this disease, cleanliness was first looked to. Good ventilation ensured by keeping the windows open at top, and reducing heat in ward from 64° to 66. Patients attacked soon after delivery, received a light mercurial purge, generally grs. v of Calomel, this followed by Castor oil, if necessary. Uterus and vagina were syringed with tepid water once daily, and when lochia was very offensive, the following was used: R.—Acid Carbolic, ʒi; Liq. Soda Chlor. ʒi. Mix. One drachm was added to half pint of water and injected into uterus, as needed. Brandy in ʒij doses was given every two hours; and ʒi of Spts. Nitr. Dule. was given every three hours with much benefit, when the skin was dry and hot. As a tonic, to control bowels, and allay nervous irritability, the following was steadily used:

R.—Quinia Sulph. grs. viii to xii.

Pulv. Opii, grs. iv.

Pulv. Camphor, grs. xvi.

M.—Chart. vi. S. One every three hours.

Nourishment in liquid form preferred. Beef tea, chicken soup, boiled milk, milk toast, and egg nog being the articles used, Whenever sweating became profuse, camphor and opium was discontinued, and the following directed:

R.—Quinia Sulph. grs. xii.

Acid Sulph. Aromat. gtt. lxxx.

Syr. Zingiberis, ʒij.

M.—S. ʒij, ter hora.

As a rule, bowels were moved every other day. Injections were generally used for the purpose of keeping them regular, formula: R.—Oleum Ricini, ʒij; Oleum Terebinth, ʒss; Lac Assafoet., ʒi. Mix, and give one-half in half pint to one pint of water, *per rectum*, every four hours if necessary. For uterine tenderness and tympanitis, Spts. Turpentine over abdomen was beneficial, but where a full counter-irritant was wanted, Emp. Canth. 5x6, was generally used, and afterward treated by Slippery-elm poultices.

Sulphite of Soda in x grs. doses, every four hours, was tried in one case, without apparent benefit.



This abstract gives you a condensed view of the history, symptoms, and treatment of the seven cases which have occurred within the last month. Some of them were severe, while others were mild in their character; and it gives me great pleasure to be able to say that we have had no deaths; they have all recovered, or are recovering rapidly. It is not necessary to dwell to any considerable extent on the particular means used. The abstract states what they were, and that they were successful.

In the last volume of the *Obstetrical Transactions* of London, several cases of this disease are reported by Dr. Graily Hewitt, mostly of a mild type. He lays great stress on compression over the region of the uterus by compresses and bandages; claiming that by this means the organ is more readily emptied of offensive matter and reduced in size. I think the pain produced by the firm compress alone sufficient to contra-indicate its use. It seems to me entirely inadequate to do what is proposed; while at the same time the syringe will most effectually accomplish the object of cleaning the uterus of offensive material speedily and effectively. I will not condemn the use of Sulphite of Soda, but I noticed no good effects from its use in one case where it was employed.

But, gentlemen, all cases can not be treated alike. It may be necessary in the country in healthy, robust women, with a full, strong pulse, to deplete, either by venesection, or by leeches, or by cups, locally; or there may be puerperal fever complicated with some other diseased condition, peritoneal or otherwise, making it necessary to change or shape your treatment accordingly. The treatment must therefore rest wholly with the condition of the patient, the indications to be filled; and hygienic regulations should be enforced. It may not be entirely out of place here, to make some remarks of a general character. I have already stated that great discrepancies of opinion exist as to what constitutes a typical case of puerperal fever. Is it a phlegmasia or local inflammation with general fever, or is it a constitutional disease with local lesions, as an accidental occurrence? In most cases local evidences of inflammation or congestion exist, either in the uterus or peritoneum, sometimes confined to the veins of the uterus or its appendages, although other organs of the body may be involved. But cases also occur which terminate rapidly in death, when no local lesions can be found; and in others where they are not sufficient to account for death. This would indicate a purely constitutional development of disease, idiopathic in character, independent of all

local inflammations, and therefore not essential to the disease. If this is established, the local manifestations must be rather looked upon as complications merely. That we may have primary local inflammations all will admit, and they must be considered as often of a fatal character, so that the distinction between them and idiopathic puerperal fever with secondary local results is not always easily made out. Our diagnosis between the idiopathic and symptomatic cases will therefore depend upon a careful examination of the history of the development of the symptoms. If the local inflammations are developed in the beginning of the attack, the case may be viewed principally as a phlegmasia. On the contrary, if the constitutional or general symptoms take precedence, it may be classed with the idiopathic form of the disease. The cases to which I have called your attention were connected with febrile symptoms, red tongue and evidences of constitutional derangement, while the local manifestations were not by any means prominent. In fact, the primary symptoms noticed for some days among the patients before any attack, and to which I called the attention of the house physician at the time, indicate the approach of puerperal fever. These symptoms were quick pulse, red tongue, fetid lochia, scanty urine, etc. My impression, is, therefore, that the cases occurring in the hospital were not to be classed as primarily inflammatory, but that they were idiopathic cases of puerperal fever, dependent upon a toxemic condition of the blood.

After attention was called to the primary symptoms, it was found that a severe case of erysipelas, which, by the way, was convalescing, existed in the medical ward below the obstetrical. The wards do not communicate directly with each other except by the winding staircase, connected with a hall at the end, and two doors intervening, but which were frequently opened.

The early and later symptoms reminded me of our experience when the house was first occupied last spring. Before the entire building was ready for occupancy the obstetrical ward was placed in the third or upper story. The ventilating arrangements had not been tested, and the faulty air was not thoroughly carried off from the surgical and medical wards below, as was ascertained by subsequent examination. In fact, the foul air from the medical and surgical wards was to some extent carried into the ward above. Several cases of erysipelas, one of gangrene, one of pyemia, and one of peritonitis, following an operation for stone, occurred in the surgical ward. During the months of January and February quite a

number of cases of puerperal fever manifested themselves. As soon as the faulty ventilation was ascertained it was promptly remedied and the disease ceased to exist. A similar experience occurred in the Florence Nightingale lying-in hospital which occupied the upper story of King's College hospital of London ; with medical and surgical wards below the obstetric. It was fitted up in most perfect order for a lying-in department. It was soon found that puerperal fever occurred with various degrees of amount and intensity, and that it bore a comparative ratio to the amount of erysipelas in the wards below. At length the fatality became so great that the department was closed. Hospital experience therefore proves what has been said in reference to the connection between the occurrence of erysipelas and other forms of disease which are sometimes called putrid, as low forms of fever, hospital gangrene, and puerperal fever. This connection seems to me to be well demonstrated and that puerperal fever is a constitutional affection, arising from toxemia or blood poisoning. But let the surroundings of the puerperal woman be as they may, her condition may be considered a critical one, particularly if the hygienic conditions are not favorable. I am ready to adopt the explanation of Trousseau who, in the discussion of this subject says: "The lying-in female exhibits a peculiar *morbid opportunity* and presents a *remarkable pathological aptitude* for the malady." The causes which may develop this morbid opportunity and pathological aptitude may be from bad hygienic proximity to diseases of a low or putrid character, and from the absorption of putrid or poisonous material developed within the cavities of the body ; and of these cavities the uterus with coagulated and decomposing blood, presents a favorable condition. Any constitutional condition of disease may also favor this internal decomposition by emitting unhealthy secretions, which may in turn become absorbed and poison the whole system. A zymotic condition of the system being induced. During the prevalence of any epidemic disease of the character alluded to, there seems to be a predisposition to take on morbid action in the puerperal condition, which adds to the liability and dangers from the influence as well as from the greater abundance of morbid material afloat in the atmosphere. With these views of the causes of puerperal fever and its pathology, we can hardly avoid the view of its contagiousness, at least, under certain circumstances ; although this is denied by some persons of good authority. In this connection it may be proper to state that pro-



tracted labors and all causes which tend to depress and exhaust the system may act as additional predisposing causes. Much more might be said upon this subject, but my time will not permit. I trust you will be able to gather my views in brief of the history, causes, symptoms, diagnosis and treatment, prophylactic and remedial, from the abstract and cases presented together with the remarks I have presented for your consideration.

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## CINCINNATI HOSPITAL.

*Service of J. F. White, M. D.*

Reported by Dr. Jas. T. Whittaker, M. D., Cincinnati.

*Hemiplegia.*

The case presented for our observation to-day, gentlemen, is of a character that will occur to you time and again in your practice, and will occasionally demand of you the exercise of all your skill and judgment. And though of a nature that admits perhaps in this instance, of no radical cure, its worst features may often be so effectually ameliorated that life may be tolerated, even sometimes enjoyed.

There are no affections to which flesh is heir, that are so obscure in their manifestations, and that admit of such diversity of interpretation, as those of the brain, none certainly which so completely derange every phenomena of life. Nor are there any which carry with them such distress throughout the entire social circle, of which the individual is a member, without monition or prodrome, in a moment, in the flush of life and of health apparently, the individual is stricken by his unseen foe, slain outright, or left with paralyzed members, and far worse, a mind enfeebled or completely dethroned, to serve out the abbreviated measure of his days. This is one form. In another, as in the case before you, premonitions exist, a little cloud no bigger than a man's hand is recognized in the distant horizon, foretelling to the eye of experience the storm that is to ensue. It behooves you then, gentlemen, to lend your attention to the case before you, that you may glean a few thoughts in its recognition and treatment, as seed thoughts, perhaps for a future harvest.



Our old friend verges near to the allotted span of life, three score years and ten. Age predisposes to brain disease, the inner coats of the arteries thicken and fibrin fills their caliber, an endarteritis results, oftener precedes and invites, the deposition there. The materials of emboli are present, and in a little while they are swept off into the circulation and reach the brain. If you should feel the radial arteries in this instance, you would be astonished at the hardened bony character of their walls ; all the coats are involved, the endo has become an arteritis, which is but a step further on. Instead then, of the gradual distention and subsequent contraction of the tube to the admission of the ventricular supply, and its propulsion throughout the system, they present unyielding though patulous cylinders for the transmission of the blood, opposing rather than assisting its course. But, that is not all ; the destruction, or the abolition rather, of the elasticity and contractility of the wall premises a loss of its innate tenacity, in other words it becomes fragile and frangible, and where above all other parts of the body is this change more frequent or more fraught with danger, than in the delicate arteries of the brain ? You may infer then, that the same condition which characterizes the arteries of the old man's arm, and you may recognize it in the temporal region as well, exists also among the meshes of his brain, and you are now prepared to hear more of the history of the case.

Our patient is a German, from the lower walks of life ; he has been exposed to all the vicissitudes of life in his avocation of peddler, and has experienced perhaps more of its storm than of its sunshine. At any rate he has had his troubles, like the rest of us, and probably like some of us, he has attempted to drown them in drink. You have been told often enough of the effects of alcohol on the organs of the body ; I need perhaps only here remind you of its particular action on the brain. Add to this the increased force of the heart's contraction, under the new stimulus, and the peculiar character of the vessel wall just mentioned, and you are in possession of elements enough in the etiology of our case. But these evil effects have been felt before the final blow : he has suffered from headache of a periodical character, throughout the whole summer, warnings to which he did not attend, partly perhaps, from his pecuniary inability to adopt a proper hygiene, and partly of course, because of his ignorance of a proper interpretation. The rattle was unheeded, and now comes the sting. One

Sunday morning he complained of greater pain than usual walked out, procured his daily paper, and returned; he seemed troubled, walked up stairs, was engaged awhile, came down and then ascended again to his room in the second story. After a while his landlord found him sitting on the stairs in a stupid condition, and paralyzed in the whole right side. When the preacher, who gives us this history, visited him, he was lying in bed; he was still able to converse, but had a difficulty in expressing the proper word, his memory was defective, there was a blowing respiration, his face was flushed. What occurred before he was found on the stairs, we know not, he does not know himself but we may surmise from the subsequent symptoms, that then and there the mischief occurred, in other words and more plainly, that an enfeebled vessel, perhaps several, gave way, and blood was poured out into the substance of the brain. This is the true apoplexy, the stroke as it is sometimes called, whether occurring by reason of an increased pressure of the blood upon the vessel walls, whether from an anomalous condition of the brain substance, or whether from a textural change in the walls themselves; in this our case perhaps from all combined. For, firstly we notice its occurrence after two ascents of the stairs, which of course accelerates the circulation, and increases the pressure in a different manner, though just as efficiently as a hearty meal, which interferes more with the venous circulation, and is the exciting cause so frequently when the predisposition exists; secondly, we have observed the effects of alcoholic intoxication and age, in producing softening, and atrophy of the brain substance, thus inducing a dilation of the vessel or vessels, and an increase of the cerebro-spinal serum to supply its place; and thirdly, and finally, and what forms by far the most frequent cause, we have presumed the textural changes in the vessel walls, not only from the analogous condition of other and distant arteries, but because we know this fatty and calcareous degeneration to be the most frequent concomitant of advancing age. If further proof be needed, glance at the senile arch in the cornea and reflect that that, too, is but an indication of the same retrograde metamorphosis. Our diagnosis then, is clear. Sanguineous effusion into the brain, fatty and calcareous degeneration of the cerebral arteries, probably also softening and atrophy of the cerebral substance, primary or secondary, none can tell.

You have heard mention of the paralysis of the right side of the

body, and you remember the explanation of the seat of the effusion in an opposite hemisphere of the brain by reason of the decussation of the nerve fibers. But there is a peculiarity in this case; while the right side of the body is paralyzed, the corresponding side of the face is also affected, and the opposite side is unimpaired. You observe the entire loss of expression in the right side of the face. There are no wrinkles in this half of the forehead, the buccinator flaps with the respiration, and the mouth is drawn to the left; excite an expression of indignation or of pleasure as I do now and these conditions become still more manifest. You observe the marked deflection of the protruded tongue toward the paralyzed side. You will recall your anatomical knowledge on the muscles engaged in this act and you will agree with me that this is a case of paralysis of the right side of the body and the right side of the face. Why do these muscles refuse their function? We will see.

Brain hemorrhage is generally central, the ventricles in the rule are excluded. The classical regions of sanguineous effusions are the outer limits or borders of the corpus striatum or thalamus opticus, sometimes inside these bodies, generally exterior because a great abundance of vessels exist here which pass directly into the brain, whereas elsewhere they are guided by and divided in the pia mater. In a few cases where the effusion occurs near the ventricle its wall may be ruptured and its cavity filled. In another small collection wherein the effusion is superficial, the cortical substance may be ruptured and blood may be poured into the subarachnoid space. Apoplexies may, too, in equally rare cases, occur in the cerebellum and in the pons. Effusion into the corpus callosum and the fornix are so seldom encountered as to be only curiosities of clinical or pathological experience. An expatiation on this theme belongs properly to the chair of pathology and I doubt not you have long since been made familiar with all these facts. I desire only to remind you of the few which are necessary to a proper interpretation of the case before us. Lesions of the corpora striata, of the thalami optici or of the peduncula cerebri, are always attended with paralysis of the opposite side. Does the existence of such paralysis refer then by necessity to an affection of these parts? We may answer in the affirmative, but with the qualification that the lesion may be indirect in its character, that is, the effusion may exercise compression upon these organs, even when it is considerably removed there-



from, and this is the reason why the diagnosis of all lesions of the brain of whatever character is attended with such great difficulty. How much is direct and how much is indirect? You may recognize the value of this question in the determination of the prognosis. When these organs are involved directly to any extent, the paralysis is permanent, when indirectly it is generally temporary. The answer then is time. There has certainly been some improvement in our patient since his entry, for the power of motion, which was completely lost in both members, has now returned to the leg. As you observe, he can elevate it at will.

It is a far greater difficulty to decide in this case as to the amount of psychical disturbance. His intellect, at best, is feeble, and the history of the case does not enlighten us much. Although subject to frequent exceptions, yet I think you may accept it as a fact, that mental derangements are due to lesion of the cortical substance again, either directly or indirectly. In this respect we are happy to notice an improvement in his condition since his entry here. He has always been able to give a rational answer, and will even attempt when asked to extend the affected arm to elevate it with the other, a proof that the intellect can not be extensively involved. He has never had a convulsion, so I think we may exclude the cortical substance in his case. His symptoms have never been severe enough for an effusion into the pons or medulla, both of which are generally fatal. The muscles of the affected side, respond, though feebly, to electricity, a proof that the connection, and this only, is at fault between the excito-motor apparatus and the motor nerves. That the functions dependent on reflex action are unimpaired is evidenced by the uninterrupted continuance of respiration, etc. Aphasia has existed; you remember the location of such difficulties, the third frontal convolution on the left side, etc. Assemble all these facts and add to them this, that  $\frac{7}{8}$  of all brain hemorrhages occur in the neighborhood of the corpus striatum and the thalamus opticus, and we may be justified in locating our lesion there. We will not venture an explanation at present of the corresponding paralysis of the face, the opposite of the rule. Our knowledge on this subject as yet is far from perfect, notwithstanding the numerous experiments made with the most extreme caution by injecting foreign bodies into the cerebral arteries of animals, or by exercising compression or ligation on those in reach. It is a question, too, which we may all leave for something of more practical value, namely, what is the



prognosis in general and what is the prognosis here? From the statements already made, you have already inferred, no doubt, that the prognosis depends not so much on the quantity of the effused matter, as on its seat. The size of the clot may vary from a barleycorn to a fist, and an effusion of the former size into the medulla would be productive of greater injury than of the latter in its usual seat. We have located the effusion in this our case in the neighborhood of the striatum and thalamus, with indirect, because temporary, involvement of the island of Reil, etc., and we have ventured the presumption that the effusion is of considerable size and is attended with some softening of the surrounding brain substance. Our patient has outlived the most dangerous period, namely the first. He has passed the period of secondary irritation which most of the books describe as a constitutional reaction, ensuing some time in the second week, when the effusion is surrounded with a capsule of enclosure protective to other parts of the brain. The observation of three weeks records a gradual improvement in the use of the leg, and a decided amelioration in the disturbed intellect. We may hope then here for a partial recovery. A complete restoration to health would not be in accord with our diagnosis. Now and then cases do occur in which recovery is complete. I remember an old gentleman of seventy-five years, who was attacked with general paralysis, but who rapidly and completely recovered. I can recall a case in my reading of an old gentleman in good circumstances, who experienced a difficulty in holding a candle in his hand one night, on retiring. He was a man of liberal education and recognized his trouble at once. He roused his servant, sent him to the library for a work on the subject, and carefully perused the chapter. Shortly after loss of consciousness supervened, medical attendance was called, an appropriate treatment was induced and recovery was complete. These are, however, but a few exceptions. In the rule, though motion and sensation returns to the lower extremity, it is generally but imperfect, and you may recognize it daily in the streets by a peculiarity of gait. The face recovers next in order, but the full power of expression scarcely ever returns. The arm carries longest, often swings a helpless appendage throughout life. The mind seldom regains its normal tone, oftener retrogrades slowly, but surely to perfect imbecility.

(The differential diagnosis between apoplexy, brain tumors, abscess, softening, etc., is omitted for want of space.)

The most essential of all questions after an establishment of a diagnosis now remains. How shall you treat it? You know in olden times there was but one treatment during the attack, a copious venesection. All classes of cases were bled, and if consciousness returned under the hemorrhage, the case was added to the list of success to blood letting. But too often the patient never survived the exhaustion artificially added to the natural prostration. You will exercise great caution in the use of the lancet. Cases do undoubtedly occur where its application is necessary, more, imperative, but these are far from forming the majority. A flushed face, a full, strong pulse, and above all that pulsation of the carotids, which is such a characteristic evidence of an interference with the circulation in the brain when unattended with hypertrophy of the left ventricle, all these occurring in a plethoric subject, would call for a venesection, bleed then from the arm boldly, cups and leeches to the temple and behind the ears, cold applications to the head and nucha, etc. In the other class, which is the majority, for the idea of an apoplectic constitution, namely, a short, heavy build, with head almost sessile to the trunk, a homo quadratus, has been long since exploded, in the cases of blanched face and feeble, fluttering pulse, you must exhibit stimulants, wine, ether, etc., by injection, when the patient can not swallow, sinapisms, frictions and all those means which have so frequently been mentioned in other forms of collapse. After the attack, you will trust to nature, for as we possess no means which will prevent the effusion of the blood in the first place, so do we possess none which will absorb it after its escape. But you will none the less carefully attend to the proper hygiene, and above all look to a proper evacuation of the bladder and rectum, good nourishing diet, beef essence and milk, perfect quiet, rest as absolute as possible, and to this end let there be no straining at stool and in micturition, appeal rather to the catheter, for as you know prostatic enlargement very often exists in age, and to frequent use of enemata.

After a while you may venture the administration of the cerebro-spinal stimulants, especially have good effects been observed with strychnia, and lately by its hypodermic use. Frictions to the paralyzed members, gentle passive motion, that they may not atrophy from disuse, and lastly must mention be made of the brilliant results sometimes attendant upon the prolonged and daily use of the constant electrical current. The exercise, then, of patience and perseverance will do much, a reliance on nature will do more,

and time will yield you the satisfaction, if not of having completely restored, perhaps, a useful member to society, at least of having mitigated his sufferings to a tolerance, and relieved his friends from the burden of his support.

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A DISSECTING LAW FOR OHIO.—At the last meeting of the Ohio State Medical Society, Drs. Selden, Howard, and Kay, were appointed a committee to memorialize the legislature for a law promoting the interests of practical anatomy. We are pleased to learn that this committee is working with great industry and efficiency, and with hopes of success. The committee are engaged in circulating the following petition in every county in the State, and we hope our friends will heartily co-operate with them, not only to secure medical signatures to the memorial, but also the names and influence of responsible and well-known citizens not of the profession:

*To the Honorable Senate and House of Representatives of the State of Ohio:*

We, your memorialists, physicians and citizens of the county of \_\_\_\_\_, would respectfully represent to your honorable body that there is among our statutes no law under which the study of Human Anatomy, by practical dissections, can lawfully be pursued. That the present law (page 437, Swan & Critchfield), which might be thought to infer the legality of such dissections, is incumbered with such provisions as to make it totally inoperative and void for such purpose. That such a knowledge of the human frame as is necessary to the physician and surgeon can be obtained in no other way than by such practical dissections. That a critical knowledge of Human Anatomy is most indispensable to any physician who would practice his professional calling with such success as the public and the laws demand of him. Therefore, we, your petitioners, earnestly pray of your honorable body to pass such a law as shall legalize the dissection of human bodies in our medical schools, and in such other places and under such regulations and restraints as your wisdom may deem proper. Also, to point out the manner of obtaining material for such dissections, so that public decency shall not be outraged, and the medical profession be relieved from the necessity of violating the law; and for such action on the part of your honorable body, we, your petitioners, will ever pray, etc.



## Medical Societies.

## CINCINNATI ACADEMY OF MEDICINE.

W. W. DAWSON, M. D., PRES'T.

J. C. MCKENZIE, M. D., SEC'Y.

*Cephalic Version.*

By invitation, Dr. *M. B. Wright* addressed the Academy.

Dr. Wright began his address by thanking the Academy for the honor of the invitation. He then went on to state that cephalic version had been the only mode of turning from the time of Hippocrates to that of Ambrose Paré, who, on account of the greater facility of its performance, introduced podalic version, and since that period this had been almost exclusively employed, and was so at the present time in Great Britain and America. The speaker then demonstrated with the manikin the different positions of shoulder presentations, and said that the diagnosis was very difficult at an early period of labor.

He then described the mode of effecting cephalic version, and demonstrated the manipulations with the manikin.

The woman is placed upon her back, with her legs drawn up and shoulders slightly elevated. Then supposing the first position exists, right shoulder presenting, the head in the left iliac fossa, breech in the right, and back looking anteriorly. The accoucheur introduces his right hand into the vagina and places his fingers over the shoulder, then with the left hand externally he pushes the breech upward and onward, thus disengaging the shoulder from pelvis, and with the fingers of the right hand acts upon the shoulder so as to push it into the right iliac fossa, and allow the breech to occupy the superior strait. Elevation of the shoulder with the right hand formed no part of operation; it was not necessary, as the prepuce upon the breech was quite sufficient to dislodge the shoulder from its engagement at the superior strait. In fact it was to be deprecated as elongating the ellipsi formed by the body of the fœtus, and increasing the risks of rupture of the uterus.



The speaker then referred to the unsatisfactory character of podalic version. It is always difficult and often quite impossible to pass the hand into the uterus on account of the strong uterine contractions. As to the results, statistics prove that of 71 cases of podalic version, 10 mothers die; 7 from rupture of the uterus; 3 from inflammation. Of course part of this mortality is to be ascribed to the conditions rendering version necessary, but the greater part is due to the operation itself. But even after the fœtus is turned by the feet, it is only converted into a footling case, of which in natural foot presentations the result is death to the child in one case in three.

Some other methods of performing cephalic version were then mentioned.

*Wigand*, at the end of last century, operated by elevating the shoulders, seizing the head and bringing it down. But the difficulty of performing the operation was so great and the results so unsatisfactory that it was abandoned.

*Flamant*, at the beginning of this century, seized the shoulder, raised it and acted externally with the other hand on the head, pushing it toward the superior strait. Greater success attended this maneuver, and some years ago it was adopted by Broxton Hicks, of London, and claimed by him as original. There are objections to both these operations. In the first it is almost impossible to act effectively on the head, lubricated as it is with the fluid. In the second it is risky to elevate the shoulder, as by so doing the ellipse is elongated and the chances of rupture increased.

Although spontaneous evolutions may occur, it is so uncertain that it can not be relied on, even if the fœtus is dead.

The speaker then alluded to some objections which had been advanced against cephalic version. Miller had stated that even after the version had been accomplished, the operation was unfinished. It was not claimed as finished; simply changed into a presentation that could be terminated by the natural efforts of the mother. Hodge objects that the shoulder is not sufficiently fixed to allow of much traction being made upon it. He did not regard this as a tenable objection, as the results of operations had proved that the shoulder was sufficiently fixed for practical purposes. It had been also stated that when podalic version had failed, cephalic version had been successfully performed. A case was then cited in proof of this statement.

The arm being in the cavity of the pelvis is no counter-indication to the performance of the operation, as it can be quite easily returned. The wrist is bent upon the forearm, and this upon the arm; then the operator places his hand under the elbow and readily returns it above the brim.

In cases of ruptured uterus podalic version is to be chosen, as the shoulder will then have retreated from the brim, and speedy delivery is necessary. When convulsions are present or threatened, the hand should never be introduced into the cavity of the uterus, therefore cephalic version is always to be attempted. He then mentioned a case where convulsions immediately followed the introduction of the hand into the uterus.

*Dr. Walker* mentioned several cases of shoulder presentation which occurred in his practice. In the first case *Dr. Wright* operated by cephalic version, the liquor amnii having been evacuated six hours before. The child was dead. The mother lived. In the second case *Dr. Dodge* turned by the feet. In the third case the cord protruded and the child was dead, so that it was resolved to turn by the feet; but in attempting to seize the feet *Dr. Marshall*, who operated, found them thrown so far back that he failed in reaching them. He then seized the shoulder and brought down the head, there being a tendency to spontaneous version. The fourth case was one of twins; the child was delivered by a midwife, the presentation being vortex; the second was a shoulder presentation, head in left fossa, hand protruded and mottled from the rough traction of the midwife. *Dr. Walker* returned the hand easily and performed cephalic version, and in six minutes the child was born alive, but died 24 hours afterwards in consequence of the rough manipulation of the midwife. He then stated that he much prefers cephalic version, both as regards mother and child, as being safer and easier.

*Dr. Dawson* mentioned a case which had occurred in his practice. When called the woman had been 8 hours in labor, and had been attended by a midwife. The waters had been evacuated 3 or 4 hours previously. The head was in the right fossa, and the left shoulder in the pelvis. He elevated the shoulder and acted externally upon the head, according to *Braxton Hicks'* method, and the corona was soon delivered. The version was effected without the slightest difficulty.

## DR. W. B. DAVIS' CASES.

Dr. W. B. Davis said :

It was my fortune to be called ten days since to attend a case of shoulder presentation, which I have been requested to report this evening. Before doing so, I will avail myself of the opportunity to state that I have attended three other cases of shoulder presentation, and assisted in two more. In two of my three cases, delivery was accomplished by podalic version, the result was death to the children and a good recovery to the mothers. In my third case the arm and punis were protruding, and the cord had ceased pulsating when I first saw the case, cephalic version was effected and the mother made a good recovery. In the two cases where I assisted the attending physician, delivery was effected by turning and bringing the feet down. The children were born dead, and one of the mothers died on the third day from her confinement, from the inflammation of the uterus. All of these cases had been in the hands of midwives, from six to forty-eight hours.

My fourth case occurred November 27, 1869. Mrs. N., residing at 594 Main St., was in labor with her third child. Her previous confinements had been easy and natural. A German by birth, aged 32 years, of nervous temperament, small stature, and a thin, spare habit. I learned from her that on November 18, she had some pain and lost a quantity of water, since that date she had more or less pain daily, and with each pain some water would pass from her; but it was not until Friday morning, November 26, that real labor set in and she went to bed. A midwife was called who remained with her. Her pains were more or less severe until two o'clock the next morning, when the remaining water came away, and an arm protruded. Her periodical pains then ceased, and a rigid contraction of the womb set in. At ten o'clock, eight hours afterward, I first saw her, and found the right hand protruded beyond the external labia, with the palm looking toward the symphysis pubis, and the thumb pointing to the right thigh. The walls of the abdomen being very thin, and void of adipose tissue, I was enabled by external manipulation to determine the position of the fœtus, the head was in the left iliac fossa, and the breach occupied the right fossa, the back was turned slightly toward the pubes, and the face had a posterior aspect. The uterus was in a state of tonic contraction, so that it was with difficulty I introduced two fingers into it.



The arm of the child was twisted on itself, I presume this was done by the midwife.

I placed the woman under the influence of chloroform, and then grasped the presenting part as near the shoulder as I could, and made firm pressure upward, with a view of elevating the shoulder out of the cavity of the pelvis, and returning the arm. This, thanks to the happy relaxing influence of the chloroform, I soon accomplished. I then directed Dr. Casset, who was assisting me, to make firm upward pressure on the breech, whilst I, with my left hand made a downward pressure on the head. During this external manipulation, my right fingers remained in the uterus pressed against the arm and shoulder. In the space of fifteen minutes I was made happy by the descent of the head. As the patient was much exhausted by her previous labor, I ordered brandy to be freely given to her, and left the rest to nature. At three o'clock in the afternoon, finding that the uterine contractions were not strong, a dose of the wine of ergot was given and at half past ten, she gave birth to a living male child. She rallied rapidly, and to-night, December 6, both mother and child are doing well.

It will be observed that I first elevated the shoulder above the brim of the pelvis before turning, this course is opposed by Prof. Wright, who claims that turning can be accomplished by lateral pressure without elevation. He also claims that the elevation of the shoulder increases the long diameter of the fœtus, and the transverse diameter of the uterus without any favorable adjustment of the head, and he has illustrated this on the manikin before us. Now with becoming modesty and due deference to Prof. Wright, I must be permitted to say that turning in the manikin and in the living human being are different operations, and I can not see how you can make "lateral pressure" effective on a child in utero, with his arm protruding and shoulder impacted in the cavity of the pelvis, with the uterus grasping it with firm and powerful pressure and driving it constantly with the cavity, without first lifting the shoulder above the brim.

My limited experience leads me to think that cephalic version is safer for both mother and child than podalic version. In those cases where it is possible, it is more easily accomplished than the latter. I should think it best to make an effort to perform it in all cases before resorting to delivering by the feet. The administration of chloroform is a great blessing to the mother, not only



by rendering her unconscious to pain, but by overcoming the uterine contractions we are enabled to turn without doing violence to the womb.

Dr. *Muscroft* stated the following case. The woman had been attended by a midwife. When he saw the case the amniotic fluid had been evacuated, the head of the child was in the right iliac fossa, the pains were active and the head was moved outward with every pain. He seized the head and very readily brought it into the pelvis and the labor terminated favorably.

Dr. *Quinn* said that he had not known before that cephalic version was such an easy operation. When the child was certainly dead as in Dr. Davis' first case, he thought that cephalic version was unjustifiable, entailing as it did in that case an interval of two hours before delivery. He regarded podalic version as the operation in such a case. In Dr. Davis' last case the operative procedure was mere external manipulation as practiced in Germany. Stated that he was in favor of cephalic version, but did not consider it so easy of performance in the living woman. He had often tried it but had never succeeded, and had never seen it succeed in the hands of others.

A few years ago he was called to see a woman in labor. Upon examination he found a shoulder presentation. As he was at that time suffering from the result of an injury, he was unable to operate, and called in another physician. While consulting as to the proceedings to be adopted, spontaneous version occurred. Now, if cephalic version had been attempted in this case the rectification would have been ascribed to it. He regarded all methods of cephalic version as the same in principle, the object being to move the shoulder and bring down the head.

Dr. *W. B. Davis* explained that he was not two hours in the operation, but that two hours elapsed before nature effected the delivery, after the rectification of the presentation.

Dr. *Major* reported two cases of cephalic version. The first case occurred in 1850, in a middle-aged woman. The head was in the left fossa and the uterine contractions so powerful that the feet could not be reached. Dr. Wise then introduced his right hand and elevated the fœtus while he (Dr. Major,) acted upon the head with one hand and on the breech with the other externally. The case terminated successfully. He had had another case of shoulder presentation in which cephalic version was employed with success.

He regarded cephalic version as performed with more facility than podalic, and considered with Dr. Davis that elevation was necessary.

A vote of thanks was then passed to Dr. Wright for his interesting lecture.

Dr. *W. H. Taylor* reported the following case, the specimen of liver having been placed in his hands for examination :

Mrs. R., aged 30, married twice, but had never borne children.

Excepting an attack of intermittent fever two years since, her health has always been good.

About three months since she complained of pain in right hypochondrium after exercise, and some disturbance of digestion, with this exception, all the functions seemed to be normal.

On examination a hard tumor was found in the epigastrium.

Iodide of Potassium afforded temporary relief.

During the progress of the case no symptoms were manifest save such as would result from enlargement of the liver, *i.e.* ascites, œdema of the lower extremities and some difficulty of breathing, but no pain ; menstruation failed at the two periods preceding death ; the skin was not discolored at any time ; death occurred Oct. 22.

The liver weighed about ten pounds, and was much enlarged in all its dimensions.

The surface was irregular from the presence of nodules varying in size from that of a pea to a large orange. In some of the nodules the centre was depressed, the peritoneal covering was but little thickened, on section the masses were found intimately connected with the surrounding liver substance, some of them were nearly white, of cartilaginous firmness, and comparatively dry, others were yellow, softer and oily. Microscopic examination, showed the existence of the nest of cells characteristic of carcinoma, though in many portions the cells had undergone fatty degenerations, the liver substance between the nodules was firm and pale. The condition of other organs was not stated.

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LITERARY EXCHANGES.—*Every Saturday*, appears in a new and improved dress, with the New Year, quarto in shape, with very excellent illustrations will make it more than ever acceptable.

AN ORDER FOR A FIRST CLASS artificial leg, for sale at a bargain.

## Correspondence.

### *Letter from New York.*

*December 11, 1869.*

EDITOR LANCET AND OBSERVER: In compliance with your request I shall relate to you a few incidents which have come to my notice since my arrival in New York, presenting them as they occurred, without regard to systematic order. By invitation I visited the State women's hospital, where I saw Dr. Thos. A. Emmett amputate the cervix for cystic disease of the os. He remarked it was a beautiful case of "ulceration" of the os uteri. It had been long treated by the application of nitrate of silver, which he said made it worse. The lips rolled out, presenting somewhat a mushroom appearance. He removed the degenerated tissue with the curved scissors, and covered the stump with the vaginal mucous membrane, by bringing it together with silver wire sutures on each side of the os, in a similar way to treating the stump of an amputated limb. It is an operation easily performed, and as the parts usually heal by first intention, the cure is speedy and effectual.

Dr. Emmett removed an ovarian tumor on December 1, weighing sixty-nine pounds. The adhesions were very extensive and the pedicle broad. He secured the pedicle with the shoemaker's stitch, which he thinks is just the thing needed. A needle is fastened to each end of a wire; they are passed through the pedicle at the same point, in opposite directions, near one edge; one needle being blunt pointed, so that it will pass through the opening made by the first, then they in like manner are passed through at another point more remote from that edge, and so on until two, three, or more stitches, sufficient to secure the entire pedicle, is made. In this instance he passed the needles through in three places, making four sections or stitches, drawing each one tight as he proceeded, until at last he wrapped the ends of the wires round one hand, and as soon as the pedicle was severed with the knife with the other hand, he grasped the stump, drew the wires with considerable force, which made the arteries shoot up one-eighth of an inch above the other substance composing the stump. The wires



were then twisted together and cut off. This maneuver not only immediately arrested the hemorrhage from the end of the stump, the stitches did not cut, causing another source of hemorrhage, but corrugated the stump, converting the broad into a comparatively round stump. This case has done so well, and especially what he denominates the "shoemaker's stitch," acted so promptly, that the doctor thinks it will produce a revolution in its sphere of application.

Prof. Wood, on Saturday, at Bellevue hospital, introduced to the class a lady on whom a few weeks before he had operated for the relief of neuralgia by removing the superior maxillary nerve, with a portion of Meckel's ganglion. The neuralgia, however, had returned in the lower jaw.

He demonstrated on the cadaver the steps taken in this very dexterous operation. He said the operation had been performed by several surgeons, mentioning the names of Profs. Blackman and Mussey, of Cincinnati, in this connection. Carbolic acid appears to be the medicine with Prof. Wood as an application to wounds, ulcers, etc. Prof. Elliot, in the course of a lecture upon malignant tumors, said carbolic acid in doses of one grain and quinine in doses of two grains, three times a day, was given a woman with cancer of the mamma, during the use of which she to all appearances got well.

Its external application has been much resorted to; but in conjunction with this the internal administration of carbolic acid for the cure of cancer may be found worthy of trial in certain conditions of the patient and peculiarities of the disease.

N. D. G.

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**To Correspondents.** We very much regret to crowd out several interesting contributions intended for the present number. Our next issue will not only give these, but valuable matter now preparing.

**Arrearages.**—We have sent out a large number of bills and expect a prompt and hearty response. The financial condition of the *Journal* was never so good as now; indeed, too good to carry a load of gratuitous names; we have, therefore, erased with a liberal hand an extended list of non-paying subscribers, and shall continue the process from time to time.



## Editorial.

*Our Greetings* go out to all our old and new friends, and with these, we trust it will not be out of place to say a few words personal. Nearly thirty years ago, this Journal was established by the late Prof. Lawson, it is therefore, the *oldest medical monthly* in America! The *American Journal* (quarterly), and the *Boston Journal* (weekly), being its seniors. It has had its dark days, but through cloud and sunshine it has always been the recognized organ of a large part of the profession, especially of the West and South. During the past year, there were about *seventy-five* contributors to its material, representing a wide circle of medical teachers, and well-known practitioners. It has weathered all storms, and is now one of the fixed institutions of the country; perhaps only two or three medical journals having a larger circulation, or more reliable and substantial patronage. This has been accomplished only by virtue of patient attention to its varied details, and working steadily for the making up of a journal devoted to the practical interests of its readers. We welcome to our pages the terse practical contributions and experiences of our friends everywhere, without regard to section, and without reference to any personal or private interests, or medical schools. We give the widest possible latitude consistent with the proprieties, but hold ourselves responsible for nobody's opinions.

Having arrived at this stage of satisfactory independence, we believe it is the time when we may freely urge our friends everywhere, to make a fresh effort to very largely increase our subscription list. We trust to them to make this effort *at once*, that we may know precisely how far to increase the number of our monthly issue. We are very sure we give a journal already well worth the price, but with a handsome addition to our list, we could and should afford improvements, that would make the *Lancet & Observer*, a pride to western physicians. In advance, we offer the value of the present number as some index of the volume for 1870. Ohio and Indiana alone, which are most immediately tributary to us, should without any extraordinary effort, *double our list*

within the next sixty days. Shall it be done? With us, editorial work is a labor of love and a pleasant task; we only ask of our friends to so work with us that we may be able more than ever, to devote ourselves to this sort of labor. Once more to all our readers, a *Happy New Year*.

*The Miami Medical College*, will conduct a course of Medical Instruction during the spring and summer, as usual. We understand there will also be a similar course given at the Medical College of Ohio, but have not learned the particulars as yet.

In the *Miami Medical College*, very nearly the same arrangement will be continued as during last season, and very little change in the gentlemen.

Lectures will be given as follows:

Dr. Chas. P. Judkins, Anatomy; Dr. J. L. Cilley, Practice of Medicine; Dr. J. C. Mackenzie, Chemistry; Dr. Thos. L. Kearney, Surgery; Dr. S. J. F. Miller, Obstetrics; Dr. C. P. Divan, Pharmacy; Dr. E. B. Stevens, Diseases of Women; Dr. W. H. Taylor, Therapeutics; Dr. E. Williams, Diseases of the Eye and Ear; Dr. W. P. Thornton, Skin Diseases; Dr. Geo. E. Walton, Laryngoscopy and Throat Diseases; M. F. Wilson, Esq., Medical Jurisprudence.

The instruction will be eminently practical: several of the topics, it will be seen, are outside of the winter curriculum, and all the lectures will be given so as to afford ample opportunity for the hospital clinics, which will be given *every day*.

The course will begin on the 15th of March, and continue three months.

*Terms*, \$20. Anatomical material at cost. Hospital, \$5.

*The Cincinnati Academy of Medicine*. Very attractive and interesting discussions have occupied the time of the Academy for a number of weeks past—mostly of an obstetrical character. Some time ago a peculiar case of extra-uterine foetation was reported by Dr. A. M. Brown, which called out a very mature report from the Committee on Obstetrics. This report appears in the present number, and it will be seen, contains much important statistical information.

Dr. Whittaker has read two papers on obstetrical matters, especially on external manipulations, determining positions, and correcting malpositions. These topics have called out protracted

debate; condensed abstracts of which we hope to present to our readers. Incidentally we have also had for fresh consideration the importance of *cephalic version*, and at the invitation of the Academy, Dr. Wright gave a special lecture on that subject, illustrated on the manikin. An abstract of this lecture, together with cases and remarks, also appears in the present number. Altogether the Academy is working with great efficiency, and is largely attended.

**Medical College Convention.** We have received the following circular which sufficiently explains itself. We trust every college in the country will be represented at the next meeting, and when together, let us honestly and earnestly endeavor to determine what measures are best for the promotion of the varied interests of medical teaching in America:

#### MEDICAL COLLEGE CONVENTION.

*To the Trustees and Faculties of the Medical Colleges in the United States:*

The undersigned committee, in accordance with the instructions of the convention of delegates from medical colleges, held in Cincinnati, in May 1866, respectfully and earnestly invite you to send delegates to a convention to be held in the city of Washington, on the Friday preceding the first Tuesday in May, 1870, for the purpose of considering all subjects connected with medical college education, and procuring the co-operation of the schools in carrying out a uniform system of medical instruction. It is very desirable that every regular medical college in this country should be represented in the convention.

N. S. DAVIS,  
S. D. GROSS,  
GEO. C. BLACKMAN,  
F. DONALDSON.

*Committee.*

CHICAGO, ILL., Dec. 22, 1869.

**The Baltimore Medical Journal.** Drs. E. L. Howard, and T. S. Latimer, propose to issue a new *medical monthly*, in Baltimore, with the above title. Terms, \$4 a year.

**Dr. J. Marion Sims**, has returned from his European sojourn, and will hereafter make New York his permanent home.



## Reviews and Notices.

***A Text Book of Practical Medicine***, with particular reference to Physiology and Pathological Anatomy. By Dr. FELIX VON NIEMEYER, Prof. of Pathology, Therapeutics, etc. Translated from the Seventh German Edition, by the special permission of the author. By *Geo. H. Humphreys*, M. D., of Bellevue Hospital, and *Chas. E. Hackley*, M. D., of New York Hospital. New York: D. Appleton & Co., 1869.

Readers generally will welcome the appearance of this work on Practice, now first introduced to English attention. Niemeyer is one of the most prominent of the present school of German pathologists, and his views and experience will make a material revolution in medical opinions, and in some respects modify our plans of practice.

That which first attracts our attention, is the absence of all preliminary matter. Omitting general principles, our author at once enters upon the treatment of disease, beginning with the diseases of the respiratory organs. And it is in this field of inquiry, that we especially note the results of the pains-taking care with which clinical medicine is studied in Germany, at this time. Under the head of Tuberculosis, we have discussed the peculiar views of Niemeyer, which materially differ from those heretofore taught by Wood, and other well-known writers; the most important practical point, as held by our author, being that the cheesy, yellow matter, called tuberculous, is not tubercles at all, but a product of inflammation. Our space, however, will not allow a review at any length, and we only hint at the value and importance of these new opinions. There are two or three points of too much importance to overlook, however, even in this brief notice. Niemeyer denies the necessity of direct inheritance of tubercle; regards hemorrhage as not a necessary indication of incipient phthisis, and believes in repeated catarrhs as a direct origin of the disease. Of course he rejects all forms of antiphlogistic treatment, and, to a great extent, his therapeutic ideas correspond with those of Bennett.

Another prominent feature of the treatise is the space devoted to the diseases of women; diseases of the male sexual organs, and cutaneous diseases. All of these departments are sufficiently full for the guidance of the general practitioner. The labors of the translator are performed with care, and readers will find an unusual freedom from Germanic idioms and peculiarities, and the dress of the publishers is elegant and satisfactory.

For sale by Robert Clarke & Co. 2 vols. 8vo., \$9 00.



***Manual of Hypodermic Medication.*** By ROBERT BARTHOLOW, A. M., M. D., Prof. of Materia Medica, etc., in the Medical College of Ohio, etc. Philadelphia: J. B. Lippincott & Co., 1869.

The monograph before us is prepared with the well-known care of its author, and we regret that we have not time nor space to review it to a considerable extent, especially as the practice of hypodermic medication is just now attracting very general attention.

The plan of Dr. Bartholow's book embraces—History of the method; Technology, embracing directions for the solution of medicines employed, and the best form of syringe—Therapeutics. Part II is devoted to the consideration of the value, doses, and uses of the various drugs which have been found of service, of which we find quite a formidable list—some twelve or fifteen articles.

Dr. B. thinks, in the matter of *solutions*, that they should not be too concentrated, as pure distilled water being employed as the diluent is entirely harmless within ordinary limits; they should be neutral, that is, neither acid or alkaline; and to avoid organic germ growths should be freshly prepared. Respecting the instrument, he prefers the syringe made of pure silver, although he accepts the glass syringe as proper, and, for some purposes, the hard rubber.

In the consideration of the individual agents, our author gives a full account of their respective therapeutic phenomena, as modified by this method of administration; and, take it altogether, we commend the book as a convenient and condensed guide for those who wish to study the subject of hypodermic medication and its applications. The author is well known as something enthusiastic on this subject, but he has not allowed this to appear particularly in the book before us. We warn our readers, who may wish to make this method available in therapeutics, that it has its dangers, and they will do well to hasten slowly in its use.

For sale by Robert Clarke & Co. Price \$1 50.

***A Name Wanted.***—Will the subscriber who left money with Mr. Rees—instrument maker—for this journal, send us his name and address? Payments should always be made direct to this office, and thus save mistakes and trouble.

***Sprague & Co.*** are selling a magnificent lot of winter clothing of all sorts desirable for gentlemen of taste.—“Down they go.”

## Obituary.

**Dr. William C. Willard**, of Muncie, Indiana, died in that city on the 6th of November, 1869, aged 59. He was a native of New England, and in his pupillage enjoyed the public and private instructions of Mussey, in the Dartmouth Medical College. He practiced for a short time in New England, but came to Muncie, Indiana, in 1836, where he practiced with great success until his death. Dr. Winans, President of the Medical Society, pronounced an able eulogium on the worth and character of the deceased, and we are furnished by the secretary with the following resolutions adopted on that occasion. The committee on resolutions previously appointed by the president, consisting of Drs. Helm, Winton, Kemper and Andrews, was called upon to report, and, through the secretary, presented the following:

"WHEREAS, It has pleased Almighty God to remove from among us Dr. William C. Willard, an old and honored member of our profession; therefore,

"*Resolved*, That by the death of Dr. William C. Willard the profession has lost a member whose skill and experience entitled him to our regard and respect, whose uniform kindness and courtesy commanded our affection, and whose honesty and integrity as a physician gave him a desirably high rank in his profession.

"*Resolved*, That in the death of Dr. Willard society has lost a useful citizen, and his family a kind and affectionate husband and father.

"*Resolved*, That we deeply sympathize with the family and friends of the deceased in their distressing bereavement, that we tender them our sincere and unaffected condolence, and commend them to the all-wise Creator, who is ever ready to soothe the bereaved heart.

"*Resolved*, That a copy of these resolutions be furnished the family of the deceased, *The Muncie Times*, *The Journal of Medicine*, and *The Cincinnati Lancet and Observer*.

"HENRY C. WINANS, *Pres't*.

"W. J. ANDREWS, *Sec'y*.

"*Muncie, November 9, 1869.*"

The report of the committee was unanimously adopted, and therefore, on motion, the society adjourned to reassemble at the late residence of Dr. Willard, and bear his body to the grave.

**C. Merritt Hinckley, M. D.**, died in Mt. Carmel, Franklin county, Indiana, November 26, 1869, at 7:30 A. M., of bilious remittent fever, closing with hemorrhage of the stomach, aged thirty-one years.

Dr. Hinckley, the son of Judah Hinckley, M. D., was born and raised near Mt. Carmel. Early in the year 1867, he graduated in the Miami Medical College, to the degree of Doctor of Medicine. He commenced practice in March of the same year, in the place of his childhood. He was married, the following May, to Miss Sallie, eldest daughter of James Sherer, Esq., of Springfield, Indiana, who survives her husband.

As a physician, Dr. Hinckley ranked high in his profession. He was ambitious to excel, and very successful in the treatment of diseases. Whenever he entered the sick room he gave confidence of success; by kindness, with a great degree of affability, misgivings and sadness fled his approach. His practice was very large—too much so for his strength. Prematurely he sacrificed himself to his profession, and laid him down and died—a good man, loved by all.

F. S. TURK.

MT. CARMEL, INDIANA.

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**Personal.** It affords us unqualified pleasure to greet the portly form and amiable face of our old friend Dr. Dandridge, on our streets, after a protracted sojourn in various parts of Europe. He is once more settled down to steady professional work. May his shadow never grow less, and that is saying a good deal.

**New Books.**—*Knapp*: Intra-Ocular Tumors. Wm. Wood & Co.  
*Smith*: Wasting Diseases of Infants. Henry C. Lea.  
*Bartholow*: Hypodermic Medication. J. P. Lippincott & Co.  
Annual Report of Smithsonian Institution, for 1868.

**The London Lancet** is one of the most valuable of all the reprints for the practical physician, containing, as it does, the freshest hospital and therapeutical contributions of London. The price is \$5 a year; or it will be furnished with the *Lancet and Observer* for \$7.

THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Vol. XIII.—FEBRUARY, 1870.—No. 2.

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Original Communications.

*Art. I.—A few Thoughts on the Subject of the Physical Basis of Life.*

An article read before the Muskingum County Medical Society, by H. CULBERTSON, M. D., Asst. Surgeon U. S. Army. Retired.

MR. PRESIDENT AND GENTLEMEN :

Without treating this subject in the order of the following heads\*, we state, that, the object in writing this paper, is to maintain, that there is a peculiar force operating in ORGANIC LIFE:—that this force is different in its nature from the “forces of matter,” acting in *life* BODIES:—that the *life-force*, and the “forces of matter,” are intimately associated, in the production of life-phenomena; that there can not be a purely PHYSICAL EFFECT in an “organic body,” and that the true basis of all therapeutics, should be, the facts developed through the practice of the test, “*experimentum crucis*.”

To proceed, we respectfully ask your attention to a portion of *muscle*. It has passed from the hands of the butcher over fifty hours. It is composed of the proteinaceous elements, carbon,

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\* By the force of negative data, through the disimilarity of life-force to any known force in physics.



hydrogen, oxygen, nitrogen, and other constituents. There is in it nerves, muscular fibres, absorbents, arteries, veins, capillaries, or structures familiar to us all. Molecular death, has taken place in it some hours since. It develops no motion or contractility. In short, it is *dead*. It has ceased to show the distinctive phenomena of ORGANIC LIFE. If undisturbed, it becomes entirely subject to the laws of physics, and soon will lose all semblance of organization, and be seen only as a putrescent body.

But suppose, ere its lifeless form is destroyed by chemical laws, that this muscle reaches the lacteals in the process of digestion, passing onward, through these, and the mesenteric glands, thence the lungs and heart, it ultimately arrives at the seat of nutrition, and in its course, has become a fitting material for animal life-structure. What has taken place in this transition? Simply, so far as the food is concerned, a *dead piece of flesh* has been placed under the influence of, and subservient to a "*force*," call it VITALITY, "*formative force*," or "LIFE." It is immaterial what is its name; we have seen, that, which was dead, identified with *life*."

It will be noticed in this process, it is essential, that, the food should be transmitted to the seat of nutrition, and therefore, it is evident, that this nutriment possesses no ability to propel itself in any direction whatever. If it reach the seat of nutrition, and is just ready to be organized, and the animal suffer death, so soon as the life-final is complete, this food, ceases to manifest all life-signs, and becomes as inanimate, as the specimen of muscle, to which I have invited your attention.

Common sense, therefore, dictates the conclusion, that in order for this matter, to become identified with "VITALITY," in the maintenance of *organic life*, it must be brought *immediately* under the control of *this force*. For it seems plain, that, could the beefsteak remain for ages, near a living structure, or if it is not completely under the power of the principle of *organic life*, it can undergo no change which shall render it fit for life-structure.

Then there must be some principle, in an *organic BODY*, which possesses the power to thus transform this muscle, and which is not found in ordinary matter; for we have no proof, whatever, that matter, as matter, can produce any such phenomena as are peculiar to "*organic life*."

Matter, can not throughout the whole inorganic kingdom, possess only an inert character, and in the domain of "LIFE," assume

new features, of such striking difference, as not to be recognized in the least degree similar.

Again, it is apparent to all, that, by no process of *human invention*, can *inorganic matter*, or *dead organic matter*, be made to assume the functions of "*life*." We may construct the most delicate mannikin, and no power, but the *fiat* of the Almighty, can give *life* to the "*FORM*."

The "*FORM*" in animal life, as well as elsewhere, is but a sequence of some force, and until its particles have become actuated, by a "*force*," it is worthless, except for purposes of illustration.

From such considerations, it would appear, that this muscle is merely *dead* organized matter,\* that in its transit through the animal body, it does not become vitalized, that it is only matter still, when ready to be deposited at the seat of nutrition; that it is matter subject to the laws of some *occult force*, the intimate nature of which we do not understand.

But it is said, this muscle is dead, because the physical conditions on which the "*materialist*" believes its life to depend, are modified in death. Can this be so, and the *mere matter* possess *life-qualities*? Can any one prove that *this muscle* has not all the *form* and *structure*, it had when living, the able Huxley, to the contrary, notwithstanding? Is it not histologically alike when dead or living? Do we not know there is no anatomical difference in several living and dead life-structures, by observations on both with the microscope? Shall we be compelled, to admit, with Huxley, for an argument† to support his theory, that there *may be material states*, which we can not recognize, in the living body, and which do not exist in dead structures? And can it be possible, that, *some* material conditions, will be revealed after death, and not those so *eminently* and *profoundly important* as those, which, according to Huxley, *give life itself*?

Here we may consider the point on which Huxley bases his system of life, viz: that as organic molecules, are seen to exhibit motion, in the fluids of the animal and vegetable, he concludes, that, these particles of matter, possess *independent life*. Now.

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\* The disciples of Huxley maintain that it is not dead, that now, molecular death has not taken place, because it has "*form*," and yet it is evident it manifests no life-signs.

† Even the basis of a doctrine.

whether they are, or are not, endowed with *such* life, one fact we do know, that soon after they are removed from a "vital" surface or the region of "vitality," they die; and hence it seems, a reasonable conclusion, that such molecules do not possess any independent life, and that this motion is simply the result of a *force* acting in an organism, and different from the "forces of matter."

When the able Huxley can show us how the phenomena of motion in, or "contractility" of an *organic form* is induced, then, and *then* only, may we be able to determine if the mode (by his solution), is true or false to his view, or if it is an *effect* accomplished by the operation of a "physical force."

Attention has been invited to these differences between "life" and "matter," because there are those who believe that "vitality" is a principle of matter, and not a SOMETHING, which boasts of an independent existence, which was created, "*sui generis*," having no identity with, and is entirely different from matter.

Others hold that, matter can generate "*life*," and certain parties claim, that, *peculiar combinations* of matter can produce life. Again some "savans," maintain, that matter has given to it, certain qualities, which make it "*life*," or in other words, that "*life*," is a more *elevated form* of matter, of the same *nature* as *matter*, but higher developed as "*life*," and that such life-matter, is created with *this* higher stamp. In the latter class we find Huxley, who in his article, on the "physical basis of life," distinctly claims, that *mere matter*, possesses, *positively* and *irrelatively*, *life properties*. He employs the term "Protoplasm," as a substance, which is the basis of animal and vegetable life, and gives to this compound, *in itself* a quality of "*life*."

Physiologists have for a long time regarded "Albumenose," as the food-basis of the animal, but Huxley, makes "Protoplasm," (a kindred compound) the food-basis of both the animal and vegetable. He however does more, he not only holds that *it* is the primary and common food of the animal and vegetable, but that *this food-basis*, is both food, and "*life*" *itself*, and hence he is driven rapidly to the conclusion, that life is *only* and *wholly* a material state. This able writer tells us, that "contractility," is but a phenomenon of matter, that *the* "force," which actuated *such* motion, is wholly derived from the "forces of matter." He tells us if you pass a current of electricity through a solution of albumen, and motion results, therefore, *this* motion, being produced by a *physical* force, that also *life* motions, is generated by the force of elec-



tricity, or some other physical power. He would have us forget here, that motion may be induced by several different causes, some of which may be natural and others supernatural.

He considers it a fair argument, that, because the telegraph machine exhibits motion, that, therefore, the principle of "LIFE," may depend on the force of electricity.

He asks us to believe, that, because the "engine," is moved by the *force* of steam, or "heat," or the "Canney coal," of Stephenson, that, therefore, "heat" may be that which generates and maintains "*life*."

He tells us, that, because a stone falls to the earth, when unsupported, that the force of "gravitation," may be the principle which gives independent motion in "*life*."

Now we have always been taught to believe, that, matter, in itself, is inert and as we can not make gold out of iron, so it would seem just as reasonable, that we can not by any arrangement of matter, *create* "*life*." Were we to adopt the views of this learned gentleman, we should go on studying, and in time, might discover the laws of "ORGANIC LIFE," until *we, ourselves*, could construct a living MAN; until we could fabricate *life* at will, and arrest *death* at pleasure.

To continue one branch of the subject, allow me to invite your attention to a few thoughts in relation to the egg. And first we remark it is an ORGANIC "*form*." It contains albumen and the yolk, which is this compound with coloring matter added. \*It also contains a "germ," which presents nearly the same chemical elements as the albumen.

It is generally admitted that the albumen does not possess *vital* properties, and that it is not the part of the egg which generates, and therefore, gives life and peculiarity to the chick. But here is the "germ," with the same chemical elements (C. H. O. N. & P. S.) as the albumen, which it is claimed are endowed with the properties of "*life*," by virtue of some quality of matter; when chemically, there is not enough difference in *their composition*, to account for the presence and maintenance of "*life*," in the "germ," and not in the albumen; and we may naturally ask, if albumen has no life, *per se*, why has its chemical prototype the "germ?"

Those who claim "*life*," for "*matter*," will perhaps say that *life*, depends on a peculiar *arrangement* of "*matter*." But this

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\* Speaking in a general sense, for purposes of illustration.



will not answer; for then the "life" will depend, most clearly, on the *arrangement*, and not on the "matter."

We are then, it seems to me, driven to the sensible conclusion, that, if two material compounds are *essentially* alike in *composition*, and it is shown, that one of *these*, does not exhibit "life," the other can not possess "life," through any materiality of the compound; and inferentially, if either contain life, it must be through some other principle than that derived from a physical force.

In this connection, we must remember, that the egg, *itself*, is an ORGANIC BODY. ART can not produce anything like it, which will develop the chick; and here, as elsewhere no process can form albumen, which remotely comes from the vegetable. We can not keep too pointedly before our minds, that all of these life-structures are the developments not of matter alone, but are the result of the operations of the forces of matter, on matter, and of the force of "life," on matter, and that they do not present, at all, except under a "force" or "power," called "VITALITY."

It would seem, then, that there must be something peculiar in the egg. What is this?

In the first place permit me to recall to your minds, the properties of matter. They are essential (magnitude and impenetrability); and non-essential, viz: Divisibility, compressibility, expansibility, porosity, mobility, and inertia. To these, it might be added, that, the operation of the forces of matter, are *uniform* and *definite* in their action.

These properties we recognize in the chick, and therefore they must be common to the "germ."

In considering "life," as a distinct principle, we can not conceive it to possess, at least, any of the non-essential qualities of matter.

But allow me to mention some qualities which, we believe, are peculiar to "life":

1st, ACTIVITY; \* contra-distinguished from *simple* or *passive motion*, and this presenting, often, as opposed to the operation of physical forces.

2d, INDIVIDUALITY; which causes even like particles of matter to present different features.

3d, REPRODUCTION; or a perpetuation of INDIVIDUALITY.

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\* From *ago*, "to drive gently or forcibly," including not only the motion but the power to generate and retard motion.

4th, IMMUTABILITY; \*or the maintenance of "*life*," notwithstanding all the molecular changes which takes place in an organic body.

5th, SENSATION; or the appreciation of bodily states and wants.

6th, The quality of PERCEPTION.

7th, The quality of INSTINCT.

And in man,

8th, The faculty of REASON.

9th, The faculty of CONSCIOUSNESS; and

10th, The WILL, and *mental* and *moral* phenomena in general.

We notice also a great versatility in the operations of the principle of life, in striking contrast to the uniformity in the action of "physical forces."

These several qualities are peculiar to life for no one has yet demonstrated that they are developed by the forces of matter.

Again the egg is *peculiar*, in the structure of its germ. Microscopists tell us, that there are certain arrangements shown in the germ, which do not appear in the albumen of the egg.

There is here, again, a marked difference between the *structureless* albumen and the "*germ*" though chemically alike. But this difference, it must be distinctly understood, does not account for the presence of life in such a form, for a life-form is but the *result* of the operation of some force or power.

From these considerations of the peculiarities of the egg, it would seem, that there is created in the egg, a life-force, or principle, having many non-material qualities, and that, these same qualities, in general, are given to all life-germs.

In this connection, it is well to remember, that, with our finite powers, it is not given us to know the intimate nature of *matter* or *spirit*. We are only able to comprehend the phenomena which are presented to our minds, by either, as influenced by agents. It would also seem erroneous to attribute to *matter* *life-qualities*, when all we know of either, are diametrically different from each other. Common sense would therefore lead us to depend, in our estimate of these relations, on what we know of the *outside* when we are not permitted to look at the *inside*; just as we know individuals to be different persons by their features, so do we know "*matter*" and "*life*" depend in their operations on different

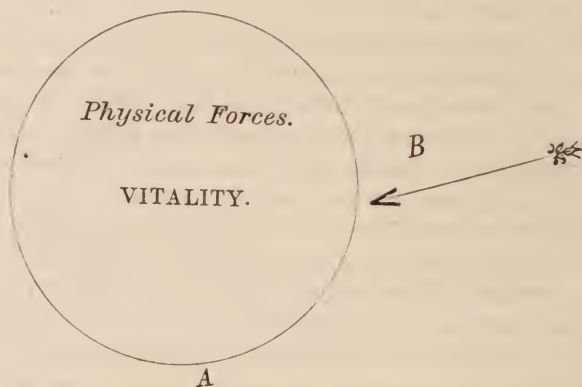
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\* An organ may partake of the quality of immutability and not be perfectly immutable.

forces, by the diverse phenomena they present to our observation.

It is probable that the doctrine advocated by Kant, is true, viz: that, all material phenomena are governed by the law of "cause and effect;" but it is the general opinion that *life* is controlled by a supernatural principle. It seems plain, too, that as "matter" has been created, so has the *principle* of "*life*."

But allow me to demonstrate by a diagram, the general opinion, and what would seem to be, a more correct view on this subject, than that of the able Huxley.



Let "A" represent an ORGANIC BODY, or FORM: Let "P" represent the PHYSICAL FORCES influencing it:

Let "V" represent the "VITALITY" or "*force of life*," acting in it:

Let the arrow "B" represent a medicine reaching and acting on the FORM.

To reduce this to an equation, which shall represent quantity of power. The power "A" is equal to the sum of the power in the "*physical forces*," and that in the VITALITY; or  $A = P + V$ .

It is claimed that, this "*form*," is the result of the operation of "*vitality*," and the "*forces of matter*," acting in it: That "*matter*" and "*vitality*" are present throughout it; that "*physical laws*" influence its matter, but that *such* matter and laws are subservient to the "*vitality*," present in the "*form*;" that there is a certain effect, running as it were, between the influence of these two classes of "*forces*," which give rise to the phenomena of "*life*."

We also claim that, medicines being merely physical agents, can only act physically; but that in estimating *medicinal effects* on an ORGANIC FORM, we are compelled to estimate the effects of such agents on "vitality," as well as on the "physical forces" of the FORM.

Here we differ from those who claim, that medicines can only influence the "physical forces" acting in an "organic form," because they are but physical agents.

We reject this belief. If you imagine me to strike the "form" represented in the diagram, I influence all that is acting in it, and the "form" reacts upon the force applied; and so, if a medicine impinge upon it, we claim it must affect the whole structure, and all that is operating within it.

And here we may state our belief, that the uncertainty exhibited in the effects of medicines, is in part, because we can not control at will, this principle of "vitality," acting in the "FORM, or manage its reactions on the "physical forces," operating in the FORM, and that we are at fault here, for the reason that we do not sufficiently understand the laws of "vitality."

If the profession of medicine is to be established on a "physical basis," then all therapeutic agents should be given by the rule of physical laws. What are we to understand by giving medicines by the "rule of physical laws?"

Allow me to state, what is known to all, that the forces of matter are "gravitation," and the unknown cause of the phenomena of "heat," light and "electricity." If we believe with some that "light" and "electricity," are actuated by "heat" (and there are strong reasons for this view), then we have but two forces to consider in this connection, viz: "gravitation," and "heat."

But intimately associated with "gravitation," is "chemical attraction," which must be considered in connection with this point of our subject.

The result of the operation of these forces is *motion*, and if *they* become quiescent rest ensues.

Then it would seem, from these considerations, that in prescribing by the "rule of physical laws," the object is simply to *increase* or *diminish* "motion" in an *organized body*, or if we invoke the physical forces, we are to *elevate* or *lower* temperature, or avail ourselves of the forces of "gravitation," or "chemical attraction" (if we suppose the latter a distinct force) in some manner in the cure of disease. Now, be it remembered, that, from the time



when the hoary sages of our profession first gave agents to drive out the "peccant humors" from the body, to the present day, we have been giving remedies by the "rule of physical laws." Do we not employ heat, as a medicinal agent? Are we not as physicians, using electricity every day to heal disease? What surgeon is there, who does not have to contend against the force of "gravitation?" And what tyro does not know that "light" is a something, which often has to be considered in the cure of many maladies?

But, while thus prescribing, the fathers of our profession never imagined (and they knew they were not so doing) they were accomplishing a *purely physical effect*, upon or in, the human (organized) body, in prescribing by the "rule of physical laws."

They knew, as we now realize, that it is utterly impossible to secure a simple *physical* result in a body, in which there is acting the force of "*vitality*," and the "*forces of matter*;" for the *former* will influence and modify the *latter*, and hence we can not treat the body as though it were entirely a physical structure.

But allow me to apply this rule (the prescribing by physical laws) in the use of several medicines. Take for instance, ipecacuanha. We propose to *positively* induce expectoration, and we *know* ipecac will produce this effect. Assume that this *positive* and *direct* effect, is induced by the force of "heat." Then, on this supposition, IPECAC, to *thus* induce expectoration, must be a generator of heat. Now, the disease we have to treat is bronchitis, a malady, in which the *heat* of the mucous membrane is above par. Hence to *positively* induce expectoration, we must give a heat-producing agent (ipecac), must add *heat*, to an already overheated membrane, to secure this medicinal result.

But this is not in accordance with facts. 1st. We know by experiment, that ipecac does promote expectoration and 2d. It does this after *excitement* has been reduced in the mucous membrane, by this very agent ipecac. Therefore, we must reduce *action* by *diminishing* "*heat*," to induce expectoration. The result is *negative*, not *positive*, when the *intention* was to secure the object by acting *positively* through the force of "heat."

But suppose we give the agent with a view of diminishing "heat," in the mucous membrane, and *thus* to induce expectoration, *i. e.* mucus-motion. Then clearly, the *increased* mucus secretion, is a *remote* sequence, for from the *diminishing* (on this theory) motion, of the ipecac, results *increased* motion, or expectoration,

when any one can see, that from *diminished* heat, or motion, should result *diminished* expectoration, or motion. Thus considered the effect, expectoration, is so remote, that, we are at once led to the opinion, that, the force of "heat," has nothing to do with the *modus operandi* of the agent, and hence the conclusion, that the medicine should not be prescribed by the rule of "heat." Again, does the ipecac promote new electrical states? Certainly we have no proof whatever, that it does this; neither have we any evidence, that it acts per force of the law of "gravitation," or by "chemical attraction," in inducing expectoration.

Take another agent, the sulphate of magnesia, give it in colonitis, what follows? An increase of motion in the colon, *i. e.*, an increased flow of serum into the bowel, which relieves the disease. Now if this result were accomplished through the force of "heat," we should have in this *increased* *secernent* motion, an *increased* heat of the colon, when we know the contrary is the effect. Here again, we see, that, by *diminishing* action in a part we *increase* its secretion.

Again, digitalis diminishes the frequency of the heart's action. If it acted by *diminishing* the heat in the heart or brain, the action of the heart, should be weakened in its force, when on the contrary we know, that under the influence of this agent, the power of the heart is increased; and here we observe the "vice versa" principle again.

Consider another agent—alcohol—which induces the most powerful stimulation; and yet we are told that the *heat* of the body is absolutely diminished under its influence. And here we notice the "vice versa" principle again.

It may be asked what induces the apparently "vice versa" phenomena, observed in the action of these several medicines prescribed by the "rule of physical laws." Is this not the "so-styled correlation of physical forces?" In answering, we claim it can not be. In this connection it is necessary to remember, that *motion* is the result of *force*, and that *rest* ensues from the removal of *force*.

Take Huxley's illustration. The "*heat*" of the locomotive induces "*motion*," and on the brake being applied to the car-wheel, "*heat*" again appears; by the friction of the rubber upon the wheel, heat re-appears.

Now, does any *heat* appear in the mucus expectoration, from the *force* of ipecac, or in the serous secretion, from the colon, from

the salts? Is it not true, that these secretions are no warmer than the blood? But, on the other hand, we know that the ipecac and salts are not generators of *heat*, but that they positively lower temperature. How then, on this theory, can agents which promote "*rest*," induce "*motion*," *i. e.*, expectoration, serous secretion, etc.? Or agents, which *increase* "*force*," *reduce* "*motion*," (as is shown in the effect of digitalis on the heart.) Or how can that which *increases* motion, *diminish* heat, as is observed in the therapeutic effects of alcohol.

What then, gentlemen, are these several phenomena, expectoration, serous secretion, etc.? How are they brought about? I can not say positively, but I suspect, they are induced by this positive force, "*vitality*," reacting against the physical forces, operating in the ORGANIC FORM.

But it seems useless to endeavor to account for the action of medicines by the operation of physical laws, for no legitimate conclusions, so far as we are able to judge, will be reached by such a course; and the negative results which follow the attempt, astonish us so much, that we are at once led to the conclusion that medicines can not act *purely* by physical laws; and hence the impropriety in prescribing them by "the rule of physical laws."

But it may be asked, do not medicines act chemically? We answer certainly, but not purely so.

Yet this is no argument—that all medicines act *even thus*, or by physical laws. No doubt you will say: Is not water formed in the body, chemically, where none is imbibed? We reply yes; but maintain that the body soon perishes, if it does not receive water from without, showing, so far as chemical action is an independent force, it will not support animal life, and leading us at once to the conclusion that the water of our bodies is not mainly supplied by inter-chemical action.

We believe then, it is immaterial, by what physical law medicines are prescribed, or believed to act, it is *impossible* to obtain a *purely physical effect*, or to operate *wholly* by a physical law, in or upon a body possessing LIFE-FORCE: for the reason that this "*life force*," is one of the *positive* agencies which must be influenced whenever a medicine is given.

No record of therapeutic effects is complete, unless the *force* of "*vitality*" is recognized in it. One might just as well expect to learn the nature of the chemical compound sulphate of iron, without ascertaining the relations of its iron, as to hope to understand



the nature of a medicinal effect without considering the influence of the force "vitality" in the process; and it is immaterial what the medicines, the rule will hold good in all. Effects of medicines we know, but their "*modus operandi*" we do not comprehend.

Therefore while prescribing by physical laws, it would seem proper to remember that therapeutical effects are not entirely physical results; and to avoid the error of believing that such *composite educts*, are brought about by the action of the physical forces alone.

In my humble opinion, we give medicines simply because they enable nature to cure disease. That they aid nature to heal this or that pathological state, is all we positively know of their effects, and to this we cling, as practical physicians.

But I must invite your attention to another doctrine connected with the "physical basis of life," viz. that all medicines act as nutrients or non-nutrients.

We claim that this can not be true, for several reasons. We have every reason to infer that the *immediate* influence of a medicine may be far different from its *remote effects* on nutrition. That because the first brick in the row, in some inexplicable way, is made to fall over toward the second, the second thus on the third, and hence the effect reaches the last, that therefore the action on the last was the *modus operandi* of the force applied to the first. It seems plain that the action on the first member of the row is the only positive agency exercised on the series, and that all the other movements are simply brought about by being within range of a force. If we give a dose of iron, it acts medicinally on the red globules, enabling the system to be furnished with more oxygen, and hence the remote effect on nutrition. We know, that could any quantity of morphia be consumed, although it is composed of C. H. O. N. and water, it will not support nutrition.

If this view is correct, any system of medication founded on such a basis must be fallacious. The therapeutic effect is so remote and dependent on so many contingencies, that no certainty can ensue from the exhibition of medicines by such a standard.

Yet, it must not be forgotten, that we have nutritive agents which like food (because they are food) act as nutrients, reaching the seat of nutrition with little or no change, and which are the products of animal or vegetable life.

It would seem then, that there is an immense field for us to cultivate, in closely following the "inductive mode," in obtaining



medical knowledge ; and were we to prescribe by "physical laws" we should be compelled to learn how each medicine acted, by the *experimentum crucis* and this is no better than what we are now doing, what we have been doing for ages, and, probably, what will always be done by those who follow us in the practice of our NOBLE CALLING.

Zanesville, O., November 23, 1869.

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**Art. II.---A Few Hints on the Treatment of Urethritis.**

By G. R. PATTON, M. D., Cincinnati.

Urethritis in the male is so essentially a local disease, and located comparatively so accessibly, that any one unacquainted with the subject might be excused for believing it to be easy of cure, but the testimony of experience is a very different tale.

Undoubtedly the majority would eventually get well without any treatment, and we know that many recover in spite of very unskillful measures, but there are not a few cases so influenced by certain causes and conditions pertaining to the individual as to render their cure more difficult than that of any other local affection.

Invariable success by any uniform treatment is impossible, that which may speedily cure one will fail in another. Each case, therefore, must be as it were, a law unto itself. By carefully investigating the circumstances and peculiarities of each case, success will be the rule and failure the rare exception.

Recognizing the fact that we are to be guided by the general principles of surgery, and as the therapeutics of the subject have been ably and exhaustively considered by the recent authorities and text-books, I desire, in lieu of having any thing specially new to present, to suggest the observance of a few measures very promotive of, and, indeed, I have found essential to success.

It is unfortunate for our curative efforts that those who contract this disorder are not trustworthy as a class. *The abstinence from every kind of irritation, local, general and dietetic*, enjoined upon them, is rarely heeded ; and this, more than all other causes combined, is our greatest obstacle to success. Its observance is by far more important than the taking of drugs.

The fact can not be too peremptorily enforced upon the patient's attention, that, without his rigorous observance of our precautions, without his hearty co-operation in recommended measures of rest, hygiene and regimen, the progress of the case must necessarily be slow, liable to relapse, and unsatisfactory, and that a cure, if attainable at all, will result only after many weeks of treatment and suffering; while, on the other hand, by assisting, as he easily can, our endeavors to cure will not be difficult nor long delayed. With the individual's willing concurrence, this malady is, save a few exceptional cases, as tractable as acute conjunctivitis.

How shall we secure from our subjects the fulfillment of this very broad therapeutical indication which it is our province and our policy to demand? As the books make no suggestions, I will venture to offer one based upon my own observation.

Let the preliminary measure, the *avant courier* of success, so to speak, invariably be an "earnest" from the individual, to ratify the assurance made us that our precepts will be kept inviolably. Our legal brethren, with more of an eye to business than we have, especially with offenders, understand such matters better, and with them a "retainer" is the word.

This *prerequisite* or *adjuvant* of the treatment is not a mere business precaution, nor vindictive indemnity for past offenses, on the principle that "those who dance must pay the fiddler"—illustrated by some of our druggists in charging these unfortunates two prices for our prescriptions—but a substantial appeal to the self-interest of the individual in securing obedience to measures for his own advantage and the safety of our reputation. It is taking advantage of human nature for the welfare of both parties. The surgeon thereby retains his case till cured, and secures beside, future patronage and recommendation.

If, on the other hand, through fear of losing patronage, or from sentiments of false delicacy, he neglects the enforcement of this forerunner of success, he will, in the large majority of cases, in punishment for his pusillanimity, be thwarted in his best and most assiduous efforts, be charged with unskillfulness, deserted before having the opportunity to bring his curative efforts to a successful issue, and will, most assuredly, experience humiliation, disappointment and professional and pecuniary loss.

Another obstacle to success arises from the custom among medical men of intrusting the management of the local means to the patient himself, and this is the main reason, too, that injections

have fallen into disuse with some of our men. A little practice and skill are requisite to inject the urethra properly. When intrusted to the patient, much valuable time is lost, as their efforts are usually nugatory. I think that just in proportion as their administration receives, as it should the personal service of the surgeon, will he be ready to admit their superiority, and favor local treatment in preference to that by the mouth, in nearly all cases.

There is evidently a tendency at the present time, as shown by the latest authorities, to use the reputed specifics less, and preferably to prosecute a cure by direct means; and, indeed, this is not without reason, and is in harmony with the rationale of resolution in all instances. Copaiba and cubebs are curative—not by revulsive action, not through a change in the blood modifying nutrition, nor by being secreted by the urethral mucous membrane itself—but only by their medicinal principles suspended in the urine coming directly into contact with the inflamed mucous membrane during micturition.

This truth has again and again been demonstrated. Ricord, in three several instances, gave copaiba to patients with blennorrhagic urethritis, who had urethral fistulæ through which all the urine passed, the matter entirely disappeared from their urine, but the discharge from the meatus continued without abatement; this speedily ceased by having the patients inject their urine through that portion of the canal not previously bathed by the urine. Roquette of Nantes had similar experience. Cullierer had a case that persisted in opposition to the balsam. He found a *cul de sac*, communicating with the meatus, which the urine did not penetrate, and which was the source of a free discharge. By injecting the urine into it, the case was quickly cured. Again, M. Hardy, of the Hôpital St. Louis, had females with blennorrhagia affecting both the urethra and vagina, treated with the specific remedies, they were cured of the urethretis, but not of the vaginitis. By ordering them to inject their urine into the vagina, a cessation of the discharge soon resulted.

If solutions could be applied as thoroughly to the urethral surface throughout its extent, as is the urine during micturition, and without excessive irritation by the means employed, it is very probable that urethretis would be exclusively treated by direct application, just as gonorrhœal ophthalmia. Copaiba and cubebs would no more be given in one case than the other.



Berkeley Hill, in his recent invaluable treatise on venereal diseases, makes use of this language: "Systematic treatment which only aims at curing by allaying irritation of every kind is the most expeditious as well as the pleasantest and least dangerous to the patient, and in the long run it is the safest for the reputation of the surgeon."

Prof. Hammond of Bellevue Medical College, in his late work on *Venereal*, writes: "Copaiba and cubebs do not appear to have much effect." "I conduct the treatment altogether by injections."

Prof. Bumstead's latest convictions are thus expressed, August 1868, in his editorial additions to M. A. Cullerier's *Atlas on Venereal Diseases*: "I believe that copaiba and cubebs are generally useless, and that alkalies, or salts with an alkaline base are better substituted for them." Of injections the same authority goes on, "I find that I am able to use them with benefit in every stage of the disease in the great majority of cases, for it is only in a decided minority that the symptoms are so acute as to contra-indicate them."

It is the advice of Cullerier, Acton, Durkee, Lee, and also that of the text-books on surgery, to restrict the use of cubebs and copaiba to the third stage of the disease as especially curative; the third stage beginning at the time when the ardor urinæ has entirely subsided (certainly a very opportune period to begin injections). By this time ten to fourteen days have elapsed, and the disease has diffused itself over the sub-pubic portion of the canal. Their unanimous recommendation of the balsams now is probably due to the fact that their injections, which they admit can cure the accessible anterior portion, have failed always in thoroughly reaching the deeper parts, on account of the inefficiency of their employment, or the need of a requisite appliance therefor.

A distinguished authority, now much in vogue (Niemeyer,) makes a statement bearing upon the subject. After highly extolling injections as speedily stopping blennorrhagia in the first stage, he agrees with the rest in not giving the balsam during the inflammatory period or second stage, but differs with them in this respect in the third stage, that he does not give the copaiba and cubebs until he has first tried and failed with injections. It will be noted that he uses and recommends a *small* syringe as though apprehensive that his injection might do harm by overfilling or reaching too deeply into the urethra, I will quote:



"The fact that their action (injections) is less certain in this stage (third stage) is because when of long standing, the inflammation is no longer confined to the more accessible anterior portions of the urethra, but has spread into the posterior regions where an injection can reach it less easily."

As a substitute for the usual anti-gonorrhœal remedies in this stage of the disease, I think that in nearly all instances, we can accomplish a cure by injecting the urethra with the fenestrated double canula, figured and described in the December number of this journal. I have with it quickly and permanently dried up the discharge in the initiatory stage and also in the second, when the inflammatory symptoms have not been marked. Two to seven days may be required, passing twice daily over the congested urethral mucous membrane, one quart of water containing from ʒss. to ʒij. of the acet. or sulph. zinc, or tannin. A prescription that I prefer to any other after inflammatory symptoms have subsided, is the following:

R.—Aquæ Picis Liquidæ, ʒxvi.  
Zinc oxidi, q. s.

To be triturated together in a mortar until the solution is neutral to test paper and then filtered.

This I have found particularly serviceable. It is astringent (by containing acet. zinc), stimulant, and has probably some specific action due to some of the properties of the tar contained in the water in solution. After passing the canula to the desired depth, the one-half of this quantity should be injected through the urethra twice daily.

I think that all cases of *gleet* may be cured by this instrument that are curable at all.

While admitting the curative properties of the balsams in the majority of cases, it is very desirable to succeed without them if possible to do so. No one can take copaiba and cubebs long without suffering or disgust; some can not take them at all, and I believe that every case can be cured without either. They are objectionable in this, that they cause gastric and intestinal disorder, also of the kidneys, and frequently disturbance of the nervous system, and cutaneous irritation.

CHORDEE.—The bromide of potassium in 40 to 60 grain doses largely diluted with water, at bed time, has, with me, proven successful nearly invariably, though I have often succeeded with a

simpler measure, namely: directing the patient to drink, on retiring, about one pint of any demulcent tea containing one-half of a drachm of nitrate of potassa.

The rationale of success is this: that the water being decanted in large quantity into the bladder, relatively diminishes the solids, and as the erection of the organ in the latter part of the night is excited ordinarily, by the density (stimulation) rather than by the mere bulk of urine, the exciting cause is removed, and with this advantage, too, that micturition in the morning is not attended with the severe pain that would otherwise be felt.

THE SUSPENSORY BANDAGE.—He who neglects this fails to take advantage of a very important element of cure. Fit it always yourself the very first day of treatment; see to it that it “binds” nowhere; if uncomfortable to the wearer, you may be sure it does not fit, and will do more harm than good. A good suspensory favors the flow of blood from the parts, removes all strain from the spermatic cord, and will shorten considerably the time required for cure, and will nearly constantly prevent epididymitis. In the treatment of over 400 cases of urethral discharges, I have had this complication in 8 cases only—not often certainly, as it is the most frequent complication of the disease.

INFLAMMATION OF THE GLANDS OF THE CORONA (*Glandulæ Tysoni*)—has been by far the most frequent complication met with even where there has been no balanitis proper. It is rarely acute or gives pain, so that when present it may not be complained of, but is excessively unpleasant and annoying from the increased secretion and moisture. The undiluted citrine ointment applied sparingly and with considerable pressure of the finger, once daily, will soon effect its cure.

The bowels should be maintained in a soluble condition, as we thereby avert perineal congestion, but drastic purgatives, or continued purgation by any means, is not recommended, as by the irritation of the rectum the urethra is involved in sympathy.

*The abortive treatment* by very strong caustic injections, also that by large doses of copaiba and cubebs, has become nearly obsolete, the former by its severity and dangers; the latter by its uncertainty; it quenches momentarily the flame, but does not put out the embers, which soon relight the previous burning, and necessitates a renewal of the treatment. During the preliminary period, prior to severe pain in urinating, all cases free from the various

cachexiæ and diatheses, can, as a rule, be resolved by simple local agents, conjoined with proper regimen, comparative rest, etc.

The solutions should be thoroughly applied by the surgeon himself, to the depth of several inches, retained 4 or 5 minutes, and of a strength just sufficient to produce slight but not severe smarting. Twice or thrice daily will be required. During the treatment the patient will take two drachms of nitrate of potash daily, largely diluted in any demulcent beverage. Three to five days will be required for a cure. The salts of zinc, or tannic acid, will answer in all cases, the strength varying from one to ten grains to the ounce of water. My plan has been to feel the way at first, beginning with two grains of either, and then augmenting or diminishing the strength as the irritation or freedom from it requires. When patients present themselves early—which unfortunately seldom happens—a speedy recovery may confidently be relied upon from these simple means alone.

The large, short, straight, fenestrated canula described in the December No., previously referred to, will enable any one to fulfill perfectly the indications of local treatment required at this period, though success with the ordinary syringe will hardly be difficult of accomplishment, unless intrusted to the patient himself.

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### *Art. III.—Sodæ Hyposulphis.*

By M. ROONEY, M. D., of Vienna  $\times$  Roads, Ohio.

A short time ago, several medical gentlemen published laudatory notices of the hyposulphite of soda in the cure of miasmatic intermittent fever. Like all much-praised remedies, it has been tried by many physicians seeking to improve their therapia, and, while its praises may be perpetuated by a few, I should judge that by many it has already been laid aside as a remedy by no means to be depended on or trifled with in a disease which, though generally manageable, sometimes destroys your patient as quickly as the mysterious force of the skies rifts the sturdy oak.

My partner and myself, during the last year and a half, have given the hyposulphite a fair trial, and though it may seem worthy

of some confidence, yet, in our opinion, it is not to be depended on in the cure of intermittent fever.

Long and extended use of the remedy, in any given case, may invariably effect a cure, but the great objection would be the indefinite length of time which it might be necessary to use the remedy, and, according to our belief, the uncertainty, even then, of performing a cure.

Another objection which the country physician must have to the use of the medicine is the following: He is called several miles to see a case which proves to be intermittent fever; he prescribes his soda, and, to his chagrin, learns that his patient has had, though taking his prescription faithfully, several successive attacks in regular periodic order. A neighbor of the patient is prescribed for by another physician, who gives quinine, and at once quickly and safely breaks up the disease. The friend of soda in such comparison will suffer.

I first prescribed the remedy for myself, July 10, 1868. In intention, though not in formality, it was as follows:

R.—Sodæ Hyposulphitis,  $\mathfrak{z}$  i.

Aquæ,  $\mathfrak{z}$  ij.

S.—Two teaspoonfull every two hours, beginning sixteen hours before chill time.

The attack did not recur, and I was much elated, not only because I was relieved, but that a remedy had been found which could be given to those who have “quinine in their bones,” and to those who fear they will, if quinine is prescribed for them. Unfortunately, I have been much disappointed, and yet have to trust to the reliable but much-abused quinine.

CASE II.—Mrs. T., æt. 40, lymphatic temperament. Had had tertian intermittent. Prescribed, July 12, 1868:

R.—Sod. Hypo.  $\mathfrak{z}$  ij.

Aquæ,  $\mathfrak{z}$  ij.

S.—As in previous prescription.

There was no recurrence of the disease till July 22. Again prescribed:

R.—Sod. Hypo.  $\mathfrak{z}$  ss.

Aquæ.

Tinct. Opii Camph. āā  $\mathfrak{z}$  ss.

S.—A teaspoonfull every two hours.

The paregoric was indicated by the presence of a diarrhæa. The



diarrhæa ceased, but the chills continued for some time, and the patient eventually had recourse to patent medicine. This was our second failure.

CASE III.—Mr. J. W., æt. 45; bilious temperament. Intermittent, though not of a well defined character. Prescribed, July 16, 1868:

R.—Sod. Hyposulph.  $\bar{z}$  ij.

Aquæ,  $\bar{z}$  ij.

S.—Two teaspoonsfull every two hours.

Patient relieved.

CASE IV.—Mr. W. J., aged 28; nervo-lymphatic temperament. Had tertian intermittent. Prescribed, July 18, 1868, as in previous prescriptions. No cure. The disease recurred, and, in addition, there arose a severe catharsis, or hypercatharsis, without doubt a result of the soda, the reason for which will soon be seen. This was our first failure with the medicine, though notes of the second case precede this case.

July 23, 1868. Prescribed for two youths. Of no service.

July 26, 1868. Again prescribed the soda, *plenis manibus*, for the same youths, and again failed, at least partially. After taking the soda for several days, there was periodic fever, but not preceded by chill. This season there have fallen under our observation many such cases, though left to nature; and the disappearance of the chill in these boys can hardly be proved to be due to the use of the soda.

July 29, 1869. Prescribed for a father and his two children. The father and one child were relieved, but the other child, though continuing to take medicine for more than a week, was not cured, and we at last gave quinine, which broke up the disease.

It is not necessary to report any more cases. Those reported are like many more cases that we treated, a report of which would be of no additional advantage.

I took no notes of the condition of the skin, tongue, secretions, and excretions, which I now regret. Cathartic effects were produced in several patients by the use of the hyposulphite, the reason of which can be accounted for by chemical reaction. According to Kane, the hyposulphite consists of  $\text{Na O}_1 \text{S}_2 \text{O}_2 + 10 \text{HO}$ . Let us suppose that another unit of water unites with each unit of the soda, and we have  $\text{Na O}_1 \text{S}_2 \text{O}_2 + 10 \text{HO} + \text{HO} = \text{Na}$

$O_1 SO_3 + 10 HO + SH =$  sulphate of soda, a well known cathartic and sulphureted hydrogen. That sulphureted hydrogen is evolved is evident from the characteristic smell of the eructations and evacuations. One lady particularly objected to the rotten-egg smell with which she seemed to be favored, and upon her the soda would always act as a cathartic, unless a corrigent were added.

By the way, the hyposulphite has proved of much advantage to many dyspeptics. Some, for whom we prescribed it in intermittent, had their dyspepsia much alleviated. It is, probably, of most service to those persons who have, in common language, sour stomachs, the advantage arising from the power which the soda has of preventing fermentation, either by altering the secretion of the stomach or rendering the ingesta incapable of acidulation. Indeed, it seems that generally those persons who were cured of intermittent had had their digestive organs more or less deranged, and to the alleviation of the gastric trouble may be attributed the cure of the intermittent. I do not believe that in ordinary doses of the soda sufficient can be introduced into the system to prevent animal or vegetable genesis. In some experiments with culicidæ, large quantities of the soda did not seem to affect their vitality. The ratio of the soda to the fluid in which the culices were, about equals the ratio of a heaping shovelfull to the blood of a person. The medicine has done well in skin diseases due to sympathy with the stomach.

A case of gastric trouble, new to me, and to which the books within my reach give no parallel case, was cured by the soda. Bouchardat says that dyspeptics may have panary fermentation take place in the stomach. If the term is allowable, the patient had a glucohydrorrhea. Fluid of a very sweetish taste would arise several times a day from the stomach to the mouth. There were also painful digestion, constipation, sleepless nights, skin yellowish and harsh. Various remedies had been tried without permanent benefit. Supposing that the sweetness was due to the starchy portion of the food being formed into sugar, and knowing that fermentation must precede this process, we endeavored to remove the difficulty by giving the hyposulphite. The soda soon made a cure.

## Translations.

### *Chloral, its Physiological and Therapeutical Effects.*

(From the Bulletin de Therapeutique, November 30th, 1869.)

Translated by Geo. E. Walton, M. D., Cincinnati.

For some time past this new hypnotic has deeply interested the medical profession. Its reputation has spread rapidly and it appears destined to occupy a conspicuous place in medical and surgical therapeutics.

This chemical was discovered in 1832 by Liebig, and in the years immediately following, was studied by Dumas, Regnault, Kopp and Wurtz, but only as a chemical problem. Recently O. Liebreich (of Berlin) propounded the chemical proposition that chloral should be considered as a trichloride of aldehyde which decomposes in an alkaline fluid to form chloroform. We know that in the organism, aldehyde and acetic acid are submitted to a reaction of which the resultant products are carbonic acid and water. We can then equally foresee that in chloral there would occur a decomposition in its final oxidation, and we ask if the chloroform, an intermediate product of this series, exercises its action in the organism.

To decide this question concerning man and animals, says M. Liebreich,\* I employed as the most convenient preparation the *hydrate of chloral*, and the doses that I shall name are of this compound. I commenced by studying its effects on animals. The first condition produced in frogs was sleep, then followed a period of anesthesia, and mortal doses caused paralysis of the heart. These effects then are completely analogous to those of chloroform as has been recently established by Claude Bernard. First, it acts on the ganglionic cellules of the brain, then on the spinal cord, and in cases terminating in death on the ganglionic cellules of the heart. In rabbits the effects were similar. A large rabbit received an hypodermic injection of twenty grains of hydrate of

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\*Academie des Sciences (Octobre).

chloral. The animal slept from half past seven in the evening until about noon the next day; on awaking it ate with avidity.

The complete success of these experiments encouraged me to repeat them on man.

Chloral is soluble in water and as in solution it exercises no irritant effect it should be very readily absorbed in the economy. This determined me at first to use subcutaneous injections.

*Observation 1.* A lunatic affected with epilepsy, tormented by delusions and insomnia, received in injections twenty-four grains of the substance. Five minutes afterwards he fell into a profound sleep which continued four and a half hours. On awaking he took his repast as usual.

In the following observations the medicine was introduced by the stomach.

*Obs. 2.* Witt. 33 years of age. Left foot crushed. Cough with expectoration. Chloro-hydrate of morphine in powder and in injections. No soporific effect. Administration of half a drachm of hydrate of chloral. Three and a half hours sleep. On awaking neither headache or any other disagreeable symptom. After a brief interruption ten hours sleep. Awoke feeling very well. Repast taken with appetite.

*Obs. 3.* Henrietta P. Acute arthritis of right wrist, extremely painful. Administration of thirty grains hydrate of chloral in a glass of water. After ten minutes a calm sleep without dreams.

The result of six experiments of Liebreich, are that the effect of the medicine follows with great precision and is accompanied with no unpleasant symptoms, such as follow the administration of morphine, for example.

These experiments were first repeated on animals in England by Richardson, and upon patients, by Spencer Wells.

In France Demarquay and Follet published the first experiments, then came the recent communications of Dieulafoy and Krishaber; the results obtained by Labbe, surgeon to the hospitals, and Guyon; then the essays by Giraldes and Worms. The last communication made by Bouchut\* to the Academy appears clinically and therapeutically so important to us that we reproduce a great portion of it.

M. Bouchut first established that if the opinions concerning this remedy are so contradictory it is because the experiments have

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\* Academie des Sciences (2 Octobre).



been made with an impure article, and the different results depends entirely on the difference of the products employed. With pure hydrate of chloral the results are rapid, evident and powerful. They are those of the most tranquil hypnotism and of insensibility sometimes absolute.

*Nature and Reactions of Hydrate of Chloral.*

I have tried with Petit and Grassi, the different hydrates of chloral sold by manufacturers, and, struck by the difference of the quality of the products have had no trouble to comprehend the varied results.

Chloral should never be employed in the liquid state. It is necessary to use it crystalized in the solid hydrated state or hydrate of chloral, in order to dissolve it in the desired vehicle. In taking it thus, as needle-pointed crystals or snowy masses, it is probable that it is well prepared, but if you wish to test its purity it is necessary to use a concentrated solution of potassa as a reactive. If the hydrate of chloral is pure it gives the potassa solution a very slight, clear, yellow tinge, giving off at the same time a well marked odor of chloroform, the solution remaining almost colorless. If in disengaging the vapors of chloroform mingled with chloro-acetic vapors it assumes a brown color, the article is impure.

The purity of the hydrate of chloral is then for this medicine as for so many others, the sole condition of efficacy in order to avoid all danger in its employment.

*Dose and Method of Administration of Hydrate of Chloral.*

Administered by the stomach or in enema (and not by subcutaneous injections which produce, as I have seen, frightful escars) to a child of four years, in doses of fifteen grains, it produces sleep and anesthesia. From five to fifteen years of age it is necessary to give thirty grains, and even forty or sixty grains, but with the last named dose the sleep is profound and the insensibility so absolute that there would be danger in a larger dose. One can not thus overwhelm the motor and sensitive nervous system without being on the brink of serious and perhaps irremediable accidents, and we should avoid such misfortunes, above all because of the responsibility which they carry with them, and in addition because of the discredit that would be brought upon a therapeutic agent of the first importance. In the adult we can administer

sixty, seventy-five or ninety grains perhaps, if the article is very pure; but this dose should not be passed. I have used the substance nearly one hundred and twenty times in different patients, and from ten to twenty-four days in succession in the same patient; and with proper prudence have never had unfortunate accidents. I believe that this will never occur if the doses named are not exceeded, doses sufficient to cause the anesthesia the physician so often desires to produce and which should not displace the chloroformic anesthesia so necessary to the surgeon.

When the patient awakes we can repeat the dose and again cause sleep, so that by repetition at intervals the physician may, if it be necessary produce the continued somnolence of the patient, in facial neuralgia or the pains of cancer, and in extensive burns. In this manner a patient may take from forty to seventy-five grains of the medicine several times in the twenty-four hours, causing each time three or four hours sleep. Only it is necessary never to give more than from forty to seventy-five grains at one time.

Is it better to repeat the dose named several times during the day than to give at once a dose of from two to four drachms, producing a more prolonged, more violent, and almost poisonous action? To ask the question when it concerns, not the experiments of the laboratory, but, clinical observation is to answer it. The physician solicitous for the interests of the patient will prefer repeating the narcotic in moderate doses, to administering at once a dose, the effects of which are unknown, and *a priori* incalculable.

I am well aware that it may be said, since the hypnotic effect of chloral is due to the formation of chloroform in the capillary blood vessels under the influence of the alkalies of the blood, and these being present, but in small quantity, chloroform can not be liberated in a large quantity, that it forms slowly, that it is continually eliminated by the lungs, that it matters not what be the dose of chloral absorbed, it will always disengage only the quantity of chloroform set free by the alkaline salts of the blood. This method of judging the possible effects of chloral may be correct, but as the clinical demonstration of it may be dangerous, I believe that from a therapeutical point of view we will do well to content ourselves with small doses often repeated.

Finally I will add that preparations of hydrate of chloral should be prescribed extemporaneously and only in quantities sufficient for the day since they alter and change in their composition so as

to become inert or dangerous. Physicians should therefore discountenance manufactured syrups prepared by fortune-hunting pharmacutists, and flamingly announced in the pages of political newspapers under the head of pharmaceutical specialties.

*Physiological Action of Hydrate of Chloral.*

After the administration of hydrate of chloral, a period of twenty to forty-five minutes elapses, when the phenomena described by M. Liebreich declare themselves so clearly that they may readily be studied. These are derangements of the mental, sensitive and motor nervous system, similar to those produced by chloroform, with this difference, that they show themselves more tardily, and once established, continue much longer. They manifest themselves by a period of agitation more or less pronounced, sometimes very short and which exhibits nothing remarkable, followed by a period of progressive somnolence, during which, intelligence falters, and is finally lost in profound sleep, accompanied by partial or complete anesthesia according to the purity and dose of the remedy. At the moment of awaking some patients exhibit a sort of intoxication similar to veritable drunkenness.

All the children to whom fifteen, thirty, forty-five or sixty grains were given, according to age, slept in less than an hour, except one, which did not sleep the first day, experiencing only an agitation of the extremities, but, the next day having taken the same dose as the evening before fell into a sleep marked by pronounced anesthesia. Another child vomited the remedy soon after ingestion and was unaffected. With these exceptions, in one hundred observations, all the patients slept profoundly, and in some instances the anesthesia was so marked that the skin might be pricked till the blood came, hair could be torn away and very painful, carious, molar teeth extracted.

The *chloral sleep* has this peculiarity, that it leaves reflex movement semi-intact so that in a subject under this influence irritation of the skin produces unconscious movements which might lead us to think sensation was not in abeyance. However, on awaking, the patients that seemed to resist the pain, have felt nothing. For example, from a child of ten years I removed two teeth publicly at the hospital. During the operation it moved the hand, and its tongue troubled me, but on awaking it declared it had felt no pain. Every one knows how painful are such operations. Save these exceptions, in one hundred and twenty experiments on children



asleep by hydrate of chloral, all were anesthetized; be it incomplete in appearance because of movements produced by pain; be it complete and prolonged with absolute oblivion of what occurred during sleep. This forgetfulness is the best proof that can be given of the profundity of the chloral sleep.

Chloral sleep is accompanied by contraction of the pupils as in ordinary sleep. It continues from one to five hours according to the dose of the remedy and the impressibility of the subject. It passes off leaving neither oppression or confusion of the intellect, and there remains only a slight frontal headache during one or two hours. In three of my patients, the awaking was accompanied by continuous talking, with bursts of laughter, and a condition resembling slight alcoholic intoxication, but these slight disorders lasted only an hour. No patient was troubled with hallucination or ringing in the ears, but some saw flying particles and flames of fire. Several were unsteady in walking, exhibiting a sort of inco-ordination of voluntary motion; a kind of stumbling which confirms what I have previously said concerning the existence of a certain degree of chloral intoxication.

During chloral sleep there is a slight coldness of the extremities, with bluish redness of the face as in the chilly stage of fevers. It is evident that the capillaries are contracted and repel the blood from the periphery to the center. At the same time the pulse is small, contracted, more frequent, exhibiting strong arterial tension as has been demonstrated by sphygmographic traces, compared with tracings obtained from the same patient, the evening and the day after the induction of chloral hypnotism. We find still another proof of capillary tension by examining the retina with the ophthalmoscope, for the veins are straight and black from venous stasis.

The *pulse* is small, contracted, augmented in frequency. From 80 it rises to 100 and 120, showing all the characters of exaggerated arterial tension; after sleep it becomes larger and less frequent, falling to the normal number of beats.

If we study the sphygmograph we find the line of elevation feeble, the descent slightly marked, forming a line almost uniformly sinuous. On the contrary after awaking the trace is more irregular; the ascent is much greater and more pronounced, but there is nothing more of importance.

The *skin* becomes dry at the extremities, where the temperature has fallen, and it is evident there is a diminution of cutaneous



perspiration. It is evident that chloral is a cooling remedy, producing opposite effects to those of opium, which is at once heating, stimulant and diuretic.

The *external temperature* of the body which falls so that it may be appreciated by the hand applied to the extremities of the patient, has, nevertheless, only fallen some fractions of a degree. I am well aware that in the case of the rabbits chloralized by MM. Krishaber and Dieulafoy, the temperature descended from the normal standard  $104^{\circ}$  to  $84^{\circ}$ , but the animal died, and such results in man would be attended with imminent peril to life. The loss of two degrees of heat in *an hour* under the action of chloral would cause me to fear for the life of my patient, and I should remark that in none of my observations has such difference occurred. The greatest fall of temperature during the entire period of somnolence was two degrees. But, generally, the thermometer does not descend more than half a degree to a degree, and sometimes during the first moments of ingestion of chloral, before sleep, there is sooner an augmentation of heat of several tenths.

The *digestive functions* are not at all deranged by the hydrate of chloral. Notwithstanding that this substance is acrid and disagreeable, it is very well supported. It excites the appetite. In one hundred observations on children, the remedy has twice caused vomiting. With the others the tolerance was perfect, and there was neither gastralgia, pyrosis, colic or diarrhœa. The result was the same with the children to whom it was administered twenty-four days in succession, in the dose of forty-five grains each day, or forty-five grains morning and evening, making about two and a half to three ounces administered in three weeks. With these facts before me I can not explain the statement of M. Laborde, relative to the accidents of intestinal irritation which chloral will produce, and which he has observed. It is evident that he has employed acid chloral, impure and badly prepared.

But the *urinary secretion* is profoundly affected, a fact not previously noticed by experimenters. At the moment of awaking from chloral sleep it is but slightly altered, but the following day it is quite dense, the specific gravity reaching 1032. It reduces the salts of copper on boiling, turns the subnitrate of bismuth slightly brown, and in fine colors potassa. We might think there is transient glycosuria, for it marks one degree on the saccharometer of Robiquet. However, if we treat the urine with the acetate of lead, then by phosphate of soda, that we may have a neutral liquid free

from organic matter, we find it no longer reduces the salts of copper. What then is the change? Are these organic matters of the bile? It is not probable. Is it uric acid? But the urine is hardly acid. I sooner believe that this alteration of the urine consists in an addition of chloral passed by the kidneys, and not sugar as we might suppose, if we contented ourselves with a superficial examination. In fact, chloral in water reduces the liquor of Fehling, exactly as though a small amount of sugar was present.

*Mode of Action of Hydrate of Chloral.*

In making known the therapeutic action of hydrate of chloral M. Liebreich said that this substance acts only after absorption by the stomach, and passing into the blood, where under the influence of the alkaline salts of the serum, it is decomposed, producing chloroform.

This explanation has been denied by Demarquay, Krishaber, Dieulafoy and Labbe, who, without contrary proof, say: No, that is not so.

For myself I am not prepared to decide this question, and I entirely yield to the illustrious secretary of the Academy of Sciences, our great chemist, Dumas, who years ago discovered chloral, and who thinks that in the blood the absorbed chloral is decomposed under the influence of the alkalis and chloroform liberated with all its narcotic and anesthetic properties.

This is also the opinion of Personne who has found chloroform in the blood of animals that have taken very pure hydrate of chloral.

How can it be otherwise, since chloral mixed in a glass with alkalis continually disengages chloroform without coloring the liquid, and, which is the reaction that I propose for testing the purity of this medicine.

Until demonstration to the contrary we must then believe with Liebreich and Dumas that the action of chloral on the economy is none other than that of chloroform produced in the blood under influence of alkaline reaction.

Now let us see what is the physiological and therapeutical action of chloral.

*Therapeutical Action of Hydrate of Chloral.*

Beside these facts which confirm and elucidate all the assertions of Liebreich concerning the physiological action of hydrate of

chloral I will add some therapeutical applications of the first importance.

Hydrate of chloral is destined to occupy a prominent place in medicine. If it is pure and properly employed it possesses none but advantages, for it causes the muscles to become powerless by enfeebling their action and producing a true amyosthenia. It procures a prolonged sleep which is forgetfulness of pain, a forgetfulness which we may prolong by new doses of the remedy; in fine, by the insensibility which it produces, it is of a nature to be often employed by the physician to facilitate a great number of small painful operations which are not worthy of the use of chloroform. Appended are the cases in which I have employed it:

*Nephritic colic, one case.*—Pain was exceedingly violent, and in thirty-five minutes of absorption of forty-five grains of hydrate, a sleep of three hours followed, after which pain had ceased.

*Extraction of Teeth.*—To a child of ten years that had a large, carious molar tooth, and had not slept in three nights, I gave thirty grains of hydrate of chloral. In a half hour, sleep being quite profound, I placed a wedge of wood between the dental arcades and removed the tooth, together with one of the canine teeth which was irregular in position. The child uttered no cries, neither gave evidence of pain other than carrying the hands to its mouth. He awoke shortly afterward, saying he had felt nothing, laughing to our satisfaction and appearing exceedingly happy that the tooth was gone.

*Chorea, four cases.*—There are cases of chorea in which the convulsive agitation is so violent that an erythema and abrasion of the prominent parts of the body is the result. In this degree, and from this complication death may supervene, and it is necessary to modify the movements at all hazard.

For this purpose inhalation of chloroform has been employed with advantage, and as hydrate of chloral seems to act by reason of the chloroform liberated by contact with the alkaline blood, it appeared to me that chloral sleep would be useful in extreme cases of chorea.

I then gave from thirty to forty-five grains to several children affected with chorea in the severe form.

Three of them slept the first day, and during the sleep of three or four hours the movements were entirely suspended. The fourth did not sleep the first day, but the next day the medicine pro-

duced its hypnotic effects and the movements were suppressed. But what was my surprise when they awoke to find that the movements were diminished. After the second dose, the next day, the motions were still more diminished, and with two children at the fourth day of this medication the movements had almost entirely ceased. Nothing more remained than imperceptible motions. One of these children that bit its tongue each moment, ceased to do so, and from impossibility of standing or walking it came to do so with ease, and no trace of chorea remained, except very slight movements.—One of these children, cured, has gone out of the hospital.

With the two others the treatment commenced five days later, is not yet terminated, but the same immediate amelioration has been observed, and it is without doubt that in chorea hydrate of chloral causes the muscles to become powerless and very promptly reduces the motions to an almost normal condition.

*Tetanus, one case.*—At the Hôpital des Enfants I learned there was a case of tetanus in the service of one of my colleagues, treated by the hydrate of chloral, but in this instance the remedy had no efficacy.

In addition to these applications already made of hydrate of chloral, there are many others which appear to me a just deduction from the facts I have mentioned. It is evident that the anesthetic sleep produced by the remedy and which permitted me to *extract teeth without pain* and to calm nephritic colic, authorize its prescription in all cases where it is desired to produce sleep or anesthetize a patient that we do not wish to chloroform.

*Labor.*—It is certain that if chloroform respired by a woman in labor, does not act injuriously on the child and that seems well established, neither will chloroform produce in the blood after the absorption of chloral by the stomach or rectum produce prejudicial effects. Then in the cases in which we would have recourse to chloroform we may use the hydrate of chloral to lessen and suppress the pains of natural labor. We may employ it in prolonged and painful obstetrical operations, as in certain cases of version and application of forceps. This is yet to be tried, and unless it favors hemorrhage the remedy will be useful.

*Puerperal Eclampsia.*—I do not doubt that the hydrate of chloral, which causes voluntary muscles to become so completely powerless, which produces temporary amyosthenia, will be useful in this complication of labor. The experiment is to be made, and it



is not unreasonable to make it, not to cure the malady, but to suppress the access and permit labor to be terminated if the convulsive crises compromise delivery.

*Large Burns.*—The intense pain of extensive burns which so profoundly enervates the patient and alone may hasten death is evidently amenable to the sedative action of hydrate of chloral. It is in cases of this kind that forced sleep is one of the greatest services a physician can render his patient.

*Acute Gout.*—We know how atrocious sometimes are the pains of acute gout described by Sydenham, with such a wealth of qualifying adjectives, and to what extremities the sufferers are sometimes reduced to find a balm for their pain. Some resort to opium in large doses, and so much the more unfortunately as the tolerance of the medicine necessitates an increase of the dose each day, so that they sometimes take from three to four and a half ounces in twenty-four hours, thus destroying the appetite and dulling the intellect. Chloral under these circumstances will have this advantage, that it does not diminish but increases the appetite, that it does not affect the mind injuriously and that when it is taken frequently there is no need of largely augmenting the dose in order to secure the action of the drug. Thus the child of which I have spoken that took forty-five grains for twenty-four successive days, slept at the last in from twenty to thirty minutes exactly as at the beginning of the medication.

#### *Contra-indications of Chloral.*

By reason of the sanguine stasis and capillary hyposthenia of the brain produced by chloral it would be imprudent to give it indiscriminately in all diseases.

Thus I think it will be necessary to abstain from giving it to persons suffering from cerebral affections. In fact, in a young girl affected with epilepsy due to an undetermined lesion of the brain which had produced inflammation of the optic nerve, chloral augmented the number of seizures. Previous to taking it she had never had more than one every eight days but the remedy caused her to have three in a single day. I ceased its use, and prescribed the bromide of potassium which acted admirably.

I think, also, that it is best not to give it in the sleeplessness of asthma, depending on disease of the heart. We should fear paralyzing the already embarrassed respiration, and it is but a few days since I refused it to a patient that asked its administration.

I preferred hyoseyamus and bromide of potassium which succeeded very well.

*Conclusions.*

1. The hydrate of chloral is a powerful sedative of the motor and sensitive nervous system.

2. If the hydrate of chloral is not very pure, so that by the addition of potassa to a solution, the vapors of chloroform are liberated without discoloration of the liquid, it is without action, and may be very dangerous.

3. Hydrate of chloral should not be administered to the adult in doses exceeding seventy-five to ninety grains, and in children it is necessary to commence with fifteen to thirty grains.

4. Preparations of hydrate of chloral should not be prepared too long previous to administration, for they may change and lose their efficacy.

5. Hydrate of chloral may be given by the mouth or in enemas, which produce the same effect as when administered by the stomach; but the latter method is preferable.

6. Hydrate of chloral should not be given to persons affected with organic disease of the heart or brain.

7. It is by the production of chloroform in the blood, under the influence of its alkaline reaction, that ingested chloral causes sleep and anesthesia.

8. It is dangerous in man to administer hydrate of chloral by subcutaneous injections.

9. Under the influence of hydrate of chloral the arterial tension is augmented and the frequency of the pulse is somewhat increased; and this tension diminishes on awaking as is shown by sphygmographic traces.

10. The urine of chloral sleep is neutral, and boiled with Fehling's liquor does not at first reduce the salts of copper, but, the next day when we find chloral passed by the kidneys the urine is more dense and reduces the salts of copper so that we may be led to think there is a glycosuria which in fact does not exist.

11. Hydrate of chloral seldom causes vomiting and never purging.

12. The temperature is slightly lowered by medicinal doses of hydrate of chloral and it should therefore be classed as a cooling remedy.

13. Under the use of hydrate of chloral cutaneous perspiration is diminished and the skin is somewhat dryer than is normal.

14. Hydrate of chloral has this advantage, that we can regulate the dose necessary to produce anesthesia, while in administering chloroform we can not control precisely the quantity of vapor ; when we employ chloroform we are not exactly sure of what we are doing and it is this that renders it dangerous.

15. The action of hydrate of chloral is exactly that of chloroform, but it is more slowly produced and lasts much longer.

16. With some persons, under the influence of chloral there is a muscular and moral agitation resembling alcoholic intoxication, but this intoxication presents nothing disagreeable or disgusting,

17. In nearly every case the sleep is characterized by well pronounced anesthesia, and seldom accompanied by hyperesthesia.

18. The degree of anesthesia is proportionate to the dose employed. In the dose of thirty to seventy-five grains, according to the age, it is complete, and permits the application of Vienna paste cauteries without pain, or even the extraction of teeth.

19. Compared with opium, which causes vomiting, which destroys the appetite, which heats and stimulates, which constipates, which excites perspiration, which produces sleep slowly and heavily, which leaves on awaking distress and prolonged somnolence, the hydrate of chloral neither vomits nor constipates, and improves the appetite; it lessens perspiration and cools the surface; it causes quick and prolonged sleep, and on awaking leaves neither somnolence nor hebetude of mind, and can be taken several days in succession.

20. In large doses hydrate of chloral produces algidity, while opium on the contrary causes heat and diaphoresis.

21. We may repeat the dose of forty-five to seventy-five grains two or three times during the day without inconvenience, and with the result each time of several hours' sleep, separated by a short period of wakefulness.

22. Therapeutically considered, the hydrate of chloral subdues the violent pains of gout, and the intense sufferings of renal colic, or large burns and toothache. It is, in a word, the first of anesthetics administerable by the stomach.

23. In cases of accouchement in which we desire to resort to chloroform, hydrate of chloral may be substituted, to appease normal pains, to facilitate obstetrical operations, and to combat eclampsia.

24. It is the most prompt and efficacious remedy, in intense chorea, when we wish quickly to suspend an agitation which menaces the days of the patient.

*Gonorrheal Rheumatism.*

Translated from Schmitt's Jahrbücher, by HENRY ILLOWY, M. D., one of the Resident Physicians of the Cincinnati Hospital.

As an appendix to our article in a previous volume, we report some monographs upon the subject in question, among which that of G. Voelkert, *de l'Arthrite Blennorrhagique* (Paris, 1868, Adr. Delahayæ) deserves primary mention.

M. Voelkert, in an introductory chapter, gives at first a concise account of all the physicians who, up to the year 1867, had ever written upon gonorrheal rheumatism. From this it appears that the French have furnished most of the literature of the subject; the English have also contributed, but the Germans paid it little or no attention. Even before the days of John Hunter, Schwediaur and Th. Selle, in 1781, described gonorrheal rheumatism, and Hippocrates, in his aphorism *Eunuchi non Laborant Podagra*, is supposed to have referred to it.

Already in 1809, gonorrheal rheumatic affections of the knee-joint have been described.

Hunter first wrote upon this affection in 1781; then came the articles of Murray, Vegarous, 1786, of Joannis Colle, Monteggia. In the year 1806, Ivan published an article on gonorrheal complications of the eye. Calixte Vincente wrote upon gonorrheal rheumatic metastasis. Then came an article from Cullerier on gonorrhea complicating rheumatism. Graves followed, in 1820; F. Ribes, Rossingol, Lænnec, L. Jourdan, Lagneau, in 1828, I. Cloquet and Foucart. Ricord did not occupy himself with it until 1833. Still later, Velpeau, Chelius, Beaume, etc.; and lastly, the article in the *Nov. Diction. de Medic.* must be mentioned.

Voelkert himself mentions fifteen cases that came under his own observation, and which are scattered throughout the various chapters on Ætiology, Symptomatology, Treatment, Nature of the Affection, and Conclusions.

We must refer those desirous of more minute detail to the monograph itself, and content ourselves, here, with giving the conclusions our author arrives at; anticipating them, however, with the table of statistics, condensed, given by Voelkert. Among the cases brought under the head of "A" are 119, from the observations of Foucart, Brandes, Rollet, Fournier; under "B," 11 cases



of Brodie and Sordet; and under "C," 25 cases, collected from the various periodicals, with Voelkert's 15 cases. (Total, 168 cases.)

	A	B	C	Total.
Knee joints.....	83	6	25	114
Ankle joints.....	22	4	13	39
Shoulder joints.....	12	4	12	28
Phalangeal joints, tarsal and carpal	23	...	4	27
Hip joints.....	16	...	3	19
Wrist joints.....	14	2	8	24
Elbow joints.....	11	2	5	18
Temporo-maxillary.....	6	...	3	9
Mediotarsal and metatarsal.....	5	1	3	9
Lumbo-sacral articulation.....	4	...	...	4
Costal cartilages.....	2	...	...	2
Sterno-clavicular articulation.....	3	...	1	4
Peroneo-tibial articulation.....	1	...	...	1
Upper extremity.....	...	...	...	1
Multiple.....	...	1	4	5

From this it appears that the knee is most frequently the seat of the affection; still, for a positive decision of the question, the statistics of non-specific rheumatism must be compared. (Rep.)

The conclusions arrived at by Voelkert are the following:

I. There is an inflammation of the joints (phlegmasie articulaire), with all the symptoms of an arthritis, which appears in the course or after the subsidence of a gonorrhea.

II. This gonorrheal arthritis appears in either sex.

III. It appears only in consequence of a urethral gonorrhea; never from balanitis, hard or soft chancre, vaginitis, or a discharge from the cervix uteri; only the urethral discharge can give rise to it. The discharge may be present during the prevalence of arthritis, diminish, or even disappear.

IV. The gonorrhea is the predisposing as well as the exciting cause. Taking cold may favor its production.

V. Generally, the larger joints become affected; other joints are, however, sometimes attacked.

VI. Hydrarthrosis is the most constant symptom of the disease. The symptomatology, as a rule, is not like that of ordinary rheumatism. The seat of the affection is the only thing common. The local character of an affection, and even the presence of all the characteristics of an arthritis, do not suffice to call it a gonorrheal rheumatism. Only in consideration of the seat of the

affection, and the causes upon which it is dependent, may the name gonorrheal rheumatism be applied. The pain is seldom absent.

VII. Complications on the part of the serous membranes are not so rare nor of so grave a character as in idiopathic rheumatism. The complications peculiar to gonorrheal rheumatism, on the part of the eye, ear, vessels and nerves are generally milder.

VIII. Not always is the affection of the joint of a mild character. In some cases it pronounces itself as chronic hydrarthrosis, ankylosis, deformity of the joint, or tumor albus. Generally, it commences to disappear in from fourteen to sixteen days. Death may be an indirect issue of the affection.

IX. If there be symptoms of inflammation, let the treatment be antiphlogistic. The affected joint must have absolute rest. To quiet pain, aconite, opium and hypodermic injections. As soon as the pain on micturition has subsided, treat the gonorrhea energetically with cubebs and balsam copavia, gramm. x, morning and evening.

X. The only possible way of explaining gonorrheal rheumatism is to assume a sympathetic action between the urethra and the fibro-serous structures; this explanation is only an hypothesis. None of the theories advanced harmonize perfectly with the facts.

XI. The existence of a rheumatic gonorrhea (Blennorrhagie arthritique) is in no way proven.

V. Meuriot (*Gaz. des Hôp.* i, 1868) publishes the following case in which, in the course of a gonorrhea, symptoms of arthritis, endocarditis, brain symptoms, and a cutaneous eruption, made their appearance, and which is the more worthy of attention from the fact that the patient died and a *post-mortem* examination was held, the results of which are appended.

L. R., æt. twenty-four; merchant; admitted to the department of Dr. Bourdon, Nov. 22, 1868; wild and delirious. For twenty-four hours the patient has been tossing about and emitting loud cries. He could give no satisfactory reply. Those that brought him to the hospital stated that, with the exception of a slight ophthalmia, the young man had always enjoyed good health, and that he was descended from a healthy family—no taint of gout or rheumatism in any of its members. The patient had led rather a wild life, and been excessively addicted to venereal indulgence. Two months ago he contracted a very violent gonorrhea. A month ago he had returned from a journey to Spain. He caught cold on the cars, was seized with fever, and amid violent pain in

his joints and profuse transpiration arrived at Paris. The ankle, knee and elbow joints very much swollen, and exceedingly painful; the urethral discharge had ceased and until now, not reappeared. All the joints were alternately attacked; they were all excessively painful, and but slightly reddened. The patient was treated with chin. sulph. 0.75 gramme, daily. Became delirious at night, without any appreciable exciting cause, and continued so till now (forty-eight hours). Next morning there was less pain, but the delirium and excitement continued.

*Condition on Admission.*—Pale; perspiration profuse; high fever; pulse, 112; great thirst; erotic delirium; no headache; pupils equally dilated; tongue slowly protruded, coated, but moist; no emesis or nausea; all joints healthy with the exception of the right shoulder joint, which is very painful; to move it, causes patient to cry out; a blowing sound at the apex of heart; lungs healthy; respiration somewhat frequent; no cough.

*Treatment.*—Sinapisms to the joints; internally, a decoction of gramine, with nitrum and the 0.05 gramme extr. thebaicum.

*Daily Record.*—Nov. 23, patient very restless through the night; quieter in the morning; some difficulty in recollection; thirst, heat, perspiration; pulse, 104; no other joint affected; passed his urine in bed; examination of it disclosed neither sugar nor albumen. Sinapism to the joints; internally, calomel. Nov. 24, emplastr. vesicat. to the knee; delirious, but less wild. Nov. 25, in *statu quo*; head shaved, and vesicatory applied; calomel continued. Nov. 26, greater quietude; fever the same; pulse vibrating, 112; palpitations; the same sound over the heart. Nov. 27, patient quiet; the right knee swollen and painful; left ankle joint somewhat involved; also, right shoulder joint. Nov. 28, palpitations; tinct. digit. gtt. xx. Nov. 29, no delirium; fever continues; pulse 112; joints in *statu quo*; pain in right shoulder; an ecchymosis upon it of the size of a two franc piece, and under the raised epidermis a serous black fluid; like spots behind right ear, on the right side of chest, on the penis, on the inner side of right elbow, in the neighborhood of trochanter of right side, on both sides of right knee, and around the malleolus internus. Prescribed, acid sulphuric dilut. Dec. 2, renewed palpitation; sound over heart the same; sinapism over precordial region; slight cedema about both malleoli; pulse 112; digitalis. Dec. 3, frequent emesis, serum from blister, clear and transparent. Dec. 5, hæmoptysis twice, rather large; vomited bile; continued palpita-



tion; right knee and right ankle joint swollen and painful; left knee and ankle only painful; Ecchymotic spots, some unchanged, others scabbed over; skin hot and covered with perspiration; pulse 96; regular; œdema about malleoli somewhat increased. Dec. 7, fever continuous; pulse 96; violent headache; low muttering, delirium; emesis; blister over precordial region; clyster, with chin. sulphuric, 1.25 grammes. Dec. 8, the blister drawn, clear and translucent; emesis and delirium continues; pulse 100; chill and rigor of twenty minutes' duration.

The following day the delirium became lower in grade. Chills of different strength and duration occurred at various intervals. Heart and joints remained in *statu quo*. Emesis continued; slight epistaxis; ecchymoses scabbed over. The great trochanter and inner condyle of femur became denuded, and on the 21st of December, amid severe chills and rigors, patient died.

*Post-mort. Sect., 36 Hours after Death.*—Decomposition slight; decubitus upon sacrum and great trochanter of right side; two large spoonfuls of yellow serous fluid in right knee joint; the cartilages healthy; tibiotarsal articulations same; nothing abnormal in other joints; the right lower extremity very œdematous; no obliteration of vessels.

*Thoracic Cavity.*—Pleura pariet. normal; slight adhesions between the individual pulmonary lobes; left lung œdematous; bronchitis; right lung in healthy condition; pericardium contains several ounces of clear serous fluid; heart normal in size; texture soft and flabby; adipose layer slight; mitral valves covered with groups of firmly adherent vegetations, from the size of a pin-head to that of a barley-corn; tricuspid covered with similar vegetations, but less numerous and smaller in size; valv. sigmoid. normal; several not very firm black clots in heart.

The vegetations, according to microscopic examinations, are a proliferation of the elements of the endocardium combined with fibrinous deposits. Ecchymoses in gastric mucous membrane, spleen, and liver; gall bladder filled with black bile; kidneys pale; traces of incipient fatty degeneration; urethra normal throughout its whole length; brain abnormally pale; some superficial vessels moderately filled with red blood; brain substance resistant, bloodless; no traces of congestion or softening.

*Infarcta* nowhere present.

M. remarks that, with the exception of the cutaneous eruption, all the other phenomena of the gonorrhœal rheumatism had been



already described by various authors; and just this hemorrhagic cutaneous eruption he regards as a symptom of the changed nutrition of the blood—another reason for the assumption of gonorrheal rheumatism.

Dr. Fort (*L'Union*, 53, 1868) reports a case of gonorrheal rheumatic coxalgia, which occurred in the person of a barkeeper, æt. 16, admitted February 10th, 1868, to the department of Prof. Richet, *Hôp. de la Pitie*.

“ February 11th, he lay on his back, the flushed face covered with perspiration, and countenance expressive of great pain. The right lower extremity, throughout its whole extent, was excessively painful, especially the superficial parts of knee and thigh. The knee was somewhat swollen—more so about femoral part; the temperature of the part was, however, scarcely at all elevated above that of other parts of the body. The slightest pressure increased the pain markedly: motion of the limb was out of question. Violent fever; pulse full, 120 beats to the minute. Patient stated that he had been thus affected only since the previous day, and in consequence of a cold by exposure while in a profuse perspiration, after violent exercise. Corroborating Prof. Richet's diagnosis of gonorrheal rheumatic coxalgia, were a swelling over the left clavicle and the *signes commémoratifs*. Besides this, there was a moderate endocarditis present, a soft, blowing murmur with the systole.

Although the whole limb was painful, Prof. Richet still assumed a coxalgia, and for the following reasons: An absolute impossibility to raise the limb; rotation of it outward; flexion of leg upon the thigh; obliteration of the hollow in the corresponding inguinal region; great pain on pressure in this region, and the pulsation in the superficial vessels rendered more prominent by a slight swelling. The two last phenomena are, according to Prof. Richet, very valuable, by authors still unmentioned, means of diagnosis. In the inguinal crease the joint is at but little distance from the skin, and only covered by a thin layer of muscles (*psoas*, *iliac*, and *pectineus*), connective tissue, and vessels. The remaining soft parts surrounding the joint are somewhat swelled. A distention of the capsular ligament and a protrusion of the soft parts thereby can not, according to R., be regarded as a cause for the swelling; for the fibrous capsule has considerable powers of resistance, and is not so easily distended; the swelling is rather caused by an inflammatory congestion of the areolar tissue sur-

rounding the capsule. This congested state satisfactorily explains the filling up in the inguinal, as also of the other known spot in the gluteal region, between trochanter major and ischium. According to R., the swelling in the inguinal region alone would be satisfactory evidence of trouble in the hip joint, even if the pain on motion, the rotation outward, and abduction, should be wanting.

On measurement, there was neither lengthening nor shortening of the limb. R. has, on the whole, never observed lengthening in such cases, as have Sauvage and others, who insist that it arises from the pressure of the intracapsular substance against the head of the femur.

The treatment was antiphlogistic, wet-cupping twice, emetics and cathartics, and after that, every morning, chin. sulphuric, 0.05 grammes. The extremity was kept in an easy, flexed position.

A few days after, a slight discharge was observed from the urethra, which, with the most careful examination of the penis, on admission could not be observed, but which, according to R., stood in ætiological relation to the affection of the joint. Some time after the swelling around the clavicle increased and the redness became more marked, an incision became necessary, which evacuated a phlegmonous, greenish, tenacious pus, such as is usually observed in gonorrheal abscesses.(?) After a short abatement in the violence of the general symptoms and local manifestations, another abscess made its appearance, 4-5 ctmtr. above the tibiotarsal articulation (on the outer aspect), from which, upon incision, pus of the same character as that from the clavicular abscess escaped. The abscesses formed in the cellular tissue, and not under the periosteum, of which R. convinced himself by a digital examination. There was evidently, according to R., a purulent diathesis in connection with the disease of the genitals.

Diarrhea set in; the soft parts around the hip joint became œdematous; febrile paroxysms came on every evening; and, amid increased swelling, a fistula formed in the vicinity of the hip joint, with extensive suppuration. Patient is so prostrated, and sinking so rapidly, that at the time of this writing (end of April) his death is expected every minute.

Alf. Fourniet (*L'Union*, 140, 142, 143, 1868) delivered an address before the Societ. Medic. des Hôpit., October 23, 1868, on "Ischias Blennorrhagica," with histories of his own (4) and other cases. He

remarks that the consecutive phenomena are diverse, differing according to the amount of urethral irritability produced by the introduction of a catheter, by a stricture, or by the gonorrheal virus. According to his view, for the ischias to become affected in the course of a gonorrhea is certainly not an accidental occurrence. The ischias blennorrhagica appears suddenly, materially abates within five days, and disappears after various periods of duration. If other symptoms of a gonorrheal rheumatism (as described by F.) are not present, and there be some other diathesis in the patient, the diagnosis will be difficult to make. The affection, according to F., is easily cured; local bleeding and opiates are highly recommended by him.

Lastly, F. calls attention to the fact that a bursæ mucosæ situated upon the tuber ischia, passing into an acute hygroma, with great suffering, might simulate ischias blennorrhagica.

Two cases of ischialgia consequential to urethral gonorrhea came also under the observation of Dr. Aug. Scarenzio (*Giorn. delle Malad. Ven. u. de Mal. de Pelle*, Nov., 1868: *Archiv. f. Dermatolog. u. Syphilis*, 1, 2, p. 307, 1869).

A farmer, æt. 27, contracted gonorrhea in his fourteenth year, which continued four years as gleet, and then disappeared. In 1861 it again recurred, and in 1862 the discharge being still present, there appeared a multiple arthritis. For two days he had excessive irritability of the urethra and an ischias on the right side. In spite of the most energetic antiphlogistic treatment (80 leeches to the ischiatic foramen, 20 vesicatories along the course of the nerves, and narcotic salves), no improvement took place. The gonorrhea was now energetically treated with cubebs and astringent injections, and in two weeks the violence of the gonorrhea and ischias was materially modified; but still, in spite of the astringent injections and 30 subcutaneous injections, each of 0.01 grammes morph. chlor., the trouble did not entirely disappear. Balsam copaiva finally cured the gonorrhea, upon which the ischias wholly disappeared. On returning to his former unsteady life he had another moderate attack of ischias, which was cured by hypodermic injections of atropine.

II. A person suffering from chronic gonorrhea and arthritis was afterward attacked with ischia. At every exacerbation of the gonorrhea there was a corresponding exacerbation of the ischias. A deep injection of zinc. sulphuric caused both to disappear.

Finally, we must mention yet one case of gonorrheal rheum-



atism after parturition, which Harley (*Dublin Jour.*, xlv (91), August, 1868), communicated to the Obstetrical Society of Dublin.

A husband who had contracted gonorrhea had coitus with his wife, who was already far advanced in pregnancy. The child was born with purulent ophthalmia, which was only with difficulty overcome. Two days after delivery the woman was seized with rheumatism; the left wrist and ankle joint, as also the shoulder and cervical muscles, were acutely attacked. After a few days the disease limited itself to the wrist and ankle joint, and lastly to the hand alone. The rheumatism was obstinate, and only cured after months. Subsequently, it was discovered that previous to parturition the woman had had a copious vaginal discharge, that the labia had swelled, and that she had suffered great pain on micturition.

And yet, after all the evidence above adduced, the existence of a gonorrheal rheumatism, according to Rep., is in no way proven.

***The Sneezing Spasm and its Relations to Hemisrania, Bronchial Asthma, and Hay-fever.***

By Dr. RUD. H. FERBER, of Hamburg.

(Archiv der Heilkunde, 6 Heft, September, 1869. Reported in Med.-Chir. Bundschaw, October, 1869. Wier.)

Translated by Dr. Epstein, 40 Everett street, Cincinnati.

(Continued from January Number, page 26.)

I would, therefore, assume the following pathogenesis for the cases of sneezing spasm, nervous asthma, hemisrania, and hay-fever. Through hereditary gout or mechanical causes, there ensues an anomalous dilatation of the veins in the lower part of the pelvis, especially around the rectum, and in the neighborhood of the internal generative organs in the female. Under such circumstances the venous current will meet with greater hindrances in its progress, than it does under ordinary circumstances of normal sized veins. The current will become slower and slower, and an over-filled state of the venous system must ensue. The peripheral regions of the body (skin, mucous membranes, *e. g.* the schneider-



ian) will become saturated with blood, the sensitive nervous fibres will suffer some lesion under such circumstances in those regions, and this will give rise to reflex action, perhaps in the province of the vagus. The pulmonary alveoli and the bronchial mucous membranes will also in this case be over-filled with blood, and then a direct action may perhaps take place on the sensitive fibres of the same nerve.

With this assumption, of seeking the chief source of the maladies in question in an irregularity of the circulation, agrees the experience, that these maladies are essentially aggravated by any circumstance under which the blood current, or the activity of the heart may happen to suffer. In this category belong lively bodily exercises, violent emotions, excesses in *venere et baccho*, and general errors of diet. Atmospheric states also (especially that of temperature), have a considerable influence upon the circulation, and that, very likely, in consequence of the influence of heat and cold upon the periphery of the body. Too warm or too cold baths have a similar influence. In sleep the circulation differs from that in waking; hence those patients whose circulation is in any way disturbed, suffer during the transition from sleep to wakening. I will again revert to this, further on.

The therapeutics of the affections under consideration, are as yet, little successful. It is said, that an emetic may remedy an attack of sneezing spasms. In France, the inhalation of iodine vapors are recommended. Hemholtz, who discovered vibriones in the nasal secretion, during an attack of hay-fever, relieved his sufferings by snuffing up a solution of quinine.

In treating a patient, the primary cause of whose affection lies in an anomaly of his circulation, in the manner alluded to above, we would advise him the avoidance of all those circumstances, which tend to produce a retardation of the circulation and an engorgement of the venous system. We would advise to such cases a strict diet, and especially prohibit all drinks containing carbonic acid, which has been abused so much in later times, even in disease. Baths also, and cold ablutions, should be used very cautiously by such patients, since these are a powerful means of over-filling the blood vessels of the periphery of the body, and hence a special cause of over-filling the venous system. Such an evenly distributed influence over the entire surface of the body, may, however, be less injurious than an habitual ablution of only certain parts of it. This point deserves certainly more attention.

If we reflect on the manifold disturbances (menstrual, spinal, in some persons immediate sneezing), which a getting wet of the feet may produce, then it becomes very supposable that the habitual washing of only certain parts, to the entire neglect of the rest of the body, must in sensitive individuals, effect a certain excitement of the cutaneous and vascular nerves in one part of it, which circumstance can not fail, in time, of developing various reflex phenomena. But how common is such a partial culture of the skin. Face, neck, the front part of the chest, and the hands, are brought in contact with cold water, every morning, while the other parts of the body get their share of it seldom or never. Baths, therefore, provided they be neither too cold nor too hot, may be sooner recommended to such patients, their influence on the periphery being evenly distributed.

The influence which the state of the atmosphere (especially the thermal), exerts upon the production of these maladies can not be too highly estimated. We know that the veins of the periphery are apt to swell, and thus afford a wider channel for the blood stream, and enlarge the boundaries of the vascular system. Hence, sudden atmospheric fluctuations between heat and cold, must also be productive of essential changes in the circulation. Now, if it happens, that an anomaly exists already in the vascular system, then the influence of atmospheric changes will manifest itself in such cases, so much the more markedly. For such patients, therefore, a residence should be selected where thermal fluctuations are the least, *e. g.* the island of Madeira. Everything possible is done for the phthisical, why not also for the nervous sufferers.

It was to be expected *a priori*, that the treatment of asthma and hay-fever, by means of compressed air, should be beneficial, and experience confirms it. The lungs expand, under this treatment, on all sides; every alveolus, which, perhaps inactive hitherto, becomes inflated, the thoracic space is enlarged, an easier reflux of venous blood comes with it, and that blood comes in contact at the same time with compressed air, and hence with more oxygen than usual. Then the periphery of the body also is exposed to a very considerable pressure, hence the relaxed walls of the veins must yield to it, and their bore becomes smaller. Such experimental remedies deserve certainly further trial.

Such patients should also, for evident reasons, abstain from too great bodily exercises, by which the already disturbed circulation must suffer still more. Thus the troublesome symptoms of the typ-

ical catarrh of early summer, which are so easily palliated by quietly remaining within doors, are at once reproduced by even slow walking, etc. Thus also in hay-fever, a sudden transition from profound sleep to wakening and quick movement, produces a sudden change in the circulation (cardiac palpitation), and with it comes at once an attack of sneezing spasms, and the other phenomena of this affection.

We have seen, and tried to explain why, the sneezing spasm makes its appearance in the morning, *i. e.* immediately on passing from sleep to wakening, and even though the transition be slow. A more sudden transition, such as the physician is often exposed to, operates still more violently. So the statistics of hay-fever, gathered by Phœbus, show the physicians furnishing a remarkably large quota for that disease. From mine own experience, being the only physician in a large suburban district, and hence frequently disturbed at night, I can testify to the pernicious effects of that sudden transition from profound sleep to wakening. Sneezing and catarrh occur almost always while dressing, although I am free from it in day-time, and during the cold season of the year. Palpitation of the heart, too, occurs almost always, on such occasions, especially when trying to fall asleep again, and that ceases only gradually. If the quantity of blood in the venous system occupies always an increased space during sleep, it follows that the longer such a state lasts, in individuals whose venous system labors under a series of hindrances, the more difficult will equalization take place, and the awakening at last, from a too long sleep, will call up a series of diseased phenomena. On the other hand, the transition to sleep and moderate sleep itself will always act beneficially, *e. g.* in hemicrania. For, in the horizontal position, and generally by an entire repose of the body, the differences existing between the two provinces of the circulation can be sooner equalized.

Hemorrhages from the rectum, and from the genitals of the female, used, in many cases, to alleviate the evils in the province of the vagus. But this alleviation is always transitory, the anomaly in the channel of the blood not being corrected by it. Hence the abstraction of blood from those regions which bled spontaneously before, or attempts to produce sanguinary secretion, are applicable only in extreme cases.

*Some Novelties in Subcutaneous Medicine.**(Continued from January Number, page 32.)*

Translated by James T. Whitaker, M. D., Cincinnati.

*Aquapuncture.*

Such is the name of a new and ingenious means of revulsion. The idea is the invention of M. Mathieu. To a small force pump a leaden tube is adjusted whose extremity is filiform. A slight pressure on the lever of the pump suffices for the introduction of the capillary point, and a few grammes of water are injected under the skin. A small pale elevation of the integument ensues, with an occasional drop of blood in the center. The first pain caused by the penetration of the water is severe enough, but this subsides quickly, and in fifteen or twenty minutes the effusion disappears.

M. Dr. Maliez has applied aquapuncture some twenty times in his clinic, from which the following are extracted :

B. 66 years. Muscular pains in the sacro-lumbar mass, accompanying, as is so often the case, a vesical atony of chronic duration, and prostatic hypertrophy. Twenty-eight points of aquapuncture in the region of pain, were followed by instantaneous relief, which still remains after forty days.

V. employed at the Mint. Rachitic pains with prostatorrhea. Eight points of aquapuncture procured instantaneous relief. Patient seen twice in eight days. No return of pain.

Madam B. Metritis with slight cystitis, pains en ceinture about the level of the third false ribs. Fifteen aquapunctures with complete cessation of the periaabdominal pains. Patient not seen again.

F., rue Sa. Louis-en-l'île. Under treatment for a long time for contraction of the external sphincter of the urethra and persistent pains in the whole perineal region which have been combated with divers means, irritant frictions, cold sitz baths, narcotics, rectal suppositories and punctures in the perineum. Though a great coward he returned voluntarily, expressing himself as almost cured by the first applications and not perceiving them further, six days after the second.

All these cases which it is useless to multiply are such as bear a resemblance to the muscular pains known as *sympathetic*, and aqua-



puncture induced a cure or relief more effectually and more rapidly than by any other mode of revulsion as that of Hoffman or Faradization, though perhaps more painful in application than either.— (*Gaz. des Hop.*, 1869, No. 127.)

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## Medical Societies.

### CINCINNATI ACADEMY OF MEDICINE.

W. W. DAWSON, M. D., PRES'T.

J. C. MCKENZIE, M. D., SEC'Y.

*Case of partial Paralysis of the Right Side, with Transitory Aphasia from a Traumatic Cause.*

By C. S. MUSCROFT, M. D., Surgeon to St. Mary's Hospital, with observations of the case by C. G. COMEGYS, M. D., Clinical Lecturer to the Cincinnati Hospital.

Wednesday afternoon, June 2, 1869, was requested by Dr. C. D. Fishburn. to visit with him Wm. Lambert, æt. 18 years, at his residence No. 95 Mulberry street. Found patient with head tied up by a handkerchief lying on the bed. He was unable to speak, but seemed to understand all that was said to him. We received the following history from his mother: She said he, with others of his companions were on Jackson Hill at or about one o'clock on the morning of the first of June, and while sitting on a bench talking to his sweetheart, was struck by some person on the side of the head and knocked down. This caused him to halloo and be very violent in his actions, without being able to speak. He was laid upon a bench and cold water poured over his head and chest for about half an hour. A person who said he was a doctor was present and stitched a small wound of the scalp from which there was a slight hemorrhage. His mother, who saw the transaction, thought he was struck with the butt end of the handle of a large knife or a slung-shot. After he had lain upon the bench for about half an hour, they made an effort to set him

on his feet, and found he could not stand. They dragged him down the hill to his home, where he was put to bed and slept well the rest of the morning.

When we first saw him forty hours after the injury, he complained, by signs, of pain in the head, and pointed to a small wound of irregular shape covering a diameter of about half an inch, situated an inch anterior to, and on a line with the parietal protuberance of the left side. When asked to get up and walk he had a staggering gait and indicated he felt pain in the right arm (more likely the true sensation was numbness), which he moved with difficulty. Said he could see as well as usual, although there was slight dilation of the right pupil. When the tongue was protruded it was drawn to the right side, with notable paralysis of the right side of the face. In endeavoring to answer questions he made an inarticulate sound to all inquiries, and upon being requested to count, made great effort to do so, but there was little or no difference in the voice sound of the names of numbers he wished to pronounce. There had been at no time coma or stertorous breathing, nor was there retention of urine; there was, however, confusion of intellect.

A careful examination of the scalp wound, revealed no injury to the skull; but upon making a free incision through the scalp about two inches long extending from the parietal protuberance forward a depression of bone corresponding in situation to the injury of scalp could be felt large enough to admit the palmar surface of the point of the index finger. There was at this time undoubtedly hemiplegia of the entire right side, but more marked in the upper extremity and face. When asked to grasp my hand with his right hand he could only contract the fingers very slightly, producing little or no pressure. At this visit antiphlogistic remedies were prescribed.

I saw him again on the 4th inst., by request of Dr. Fishburn, who was prevented from being present on account of sickness in his own family. I thought him somewhat improved, although his pronunciation was no better. At my next visit, June 5, the following test of his memory and powers of expression were made in the following manner. I tried to have him pronounce words which I would address to him and the meaning of which he seemed to understand, but he was unable to pronounce any of them, giving the same utterance to them all. I then wrote words distinctly upon a slate which he tried to read; for instance, first,

the name of his mother, this he read and pointed to her, then the name of one of his sisters (two being present), and he would first point to one and then the other, but it was evident he could not apply the name to the proper person; he was next tried with the word Cincinnati, which from his motions he seemed to understand, but when Mulberry street (the name of the street on which he resided) was written he could make nothing at all out of it. I thought perhaps this might depend upon his defective education, so I tried him again with the same words distinctly pointed in roman letters, but he could make nothing of it. The paralysis of the lower extremity had diminished perceptibly, and to contract the fingers of the right hand was considerably increased. I saw him again the next day, when similar tests of his memory to apply to written words, resulted about as before stated, and his power of pronunciation not improved, giving both words and numbers like sounds. At my next visit, three or four days from the last, which was in company with Dr. Fishburn, I found all his symptoms improved, and he was then able to read and understand readily the same words I had tried him with before, as well as others. There was also decided improvement in the contractile power of the fingers. I saw him again in the course of four or five days, this time in company with Dr. C. G. Comegys at the request of Dr. Fishburn. At this time all his symptoms had improved, there still being present palsy of the right side to some extent. He could now pronounce a few words indistinctly, and repeat names of things after they were pronounced to him, but when asked almost immediately after to give the names of the same objects he would nearly always make some unintelligible noise. We requested him to tell his own name which he could do, so as to be understood after it was first pronounced for him, but in a few minutes after, if asked his name the effort resulted in an unintelligible jargon. He could, however, understand simple, written words very well. We then tried him with all the letters of the alphabet, and the following was the result of his efforts. He pronounced A, o, B, e, C, a, D, d, E, e, F, ough, G, e, H, ough, I, e, J, j, K, kayeh, L, l, M, m, N, yen, O, o, P, twee, Q, twoo, R, je, S, ayah, T, t, U, twoo, V, g, W, twoo, X, eight, Y, tow, Z, zes. Upon again requesting him to pronounce his name (William Lambert), he called it Zim Yer. This examination was on June 14.

Dr. Comegys had visited him a few days previous to this time, and here presents the result of his interview :

Dr. *Comegys' Observations*.—Found him unable to talk, evidently from want of recollection of words to express his ideas.

Understood what was spoken to him, for example : Said he could write, but when pencil and paper were given to him to write his name (William Lambert), he wrote very slowly "Lambert bermber Dhert," then shook his head, negatively, and essayed again as follows :

Ch w bernh. Then attempted to write Cincinnati, but failed to recollect more than one or two syllables. Could not write anything intelligible for the name of Mulberry street.

Could write figures as 1, 2, 3, 4, etc.

When asked if he knew certain tunes, said yes, and tried to sing, but could not recollect the music, when it was sung for him, recognized it and repeated it fairly at once ; but after a little pause could not recollect it. Knew the days of the week, but called Monday, onday, forgetting m.

Pronounced A, o, B, e, C, a, F, ough, G, e, H, ough, N, yer, P, twe, S, ya.

The great interest in this case is the similar effect upon the brain, from an external injury, as that frequently met with from idiopathic disease of the organ, producing that very interesting and peculiar condition known as aphasia. The aphasia in this case probably being the result, simply of concussion of that portion of the brain to which pathologists have referred the seat of the disease, namely, the convolutions of the left anterior cerebral lobe.

Dr. Fishburn saw this patient a few weeks ago, when he seemed to be in perfect general health, although there was still present slight paralysis of the right side of face and tongue.

### *Report of a Case of Mollities Ossium, in its earlier stage.*

By BENJ. F. MILLER, M.D., Surgeon to Good Samaritan Hospital.

Among the rare forms of osseous disease we find that remarkable condition known as mollities ossium, or eccentric atrophy. Most writers on this strange malady unite in making a broad distinction between this and that form described as rickets.



During the present year a case of mollities came under my care, from whom the following history was obtained :

Mrs. P. M., Jewess, born in Germany, æt. 44 years, married nineteen years, is the mother of three healthy living children. Parents living and healthy, father æt. 63, mother 60 years. Has resided in United States sixteen months, always regarded herself healthy up to five years since, at which time pain began in her left limb, and affected her particularly about the knee joint, for which she frequently had wet cups applied. During a season of three years the pain caused her great annoyance. After this period it gradually subsided, and she thought herself quite well, with the exception of acid eructations that continues with her up to the present time. For the last few years she has not digested her food well, and was informed by a physician that she had dyspepsia.

On the 17th day of July, 1868, while walking barefooted in her yard, she accidentally stepped upon a sharp fragment of bone with her left foot, receiving a cut in the plantar surface, beneath the second metatarsal bone, in length about three-quarters of an inch, and to the depth of half an inch. In the course of a few days it grew painful and much swollen. In this condition she was admitted to the Jewish hospital of this city for treatment. In a few weeks the inflammation was subdued, but the foot remained enlarged and indurated. The wound did not close, but contracted to a small sinus, through which small fragments of bone occasionally escaped. On the 28th of October she was transferred to the Samaritan hospital for further treatment. Through the sinus caries of the second metatarsal bone could be detected, and this bone was removed by Prof. Blackman. Other sinuses formed and showed themselves at different points over the foot, through which an ill-conditioned fluid continually escaped. Local treatment was kept up afterward for months, when it was finally abandoned, and the tarsal bones now being involved, all hope of saving the foot was lost, amputation was determined upon as the only advisable course to pursue—and the patient being anesthetized the foot was removed at the ankle by Symes' method.

(I was kindly assisted by Drs. Kearney and Stevenson).

The bones of the stump were unusually vascular and bled freely, so much so that it caused us to delay the dressings for nearly three hours. Finding that the flow of blood was not entirely arrested, and mixed with it were oil globules, leading to the suspicion that

the bones were in an unhealthy state, a test was made with the bone gogue forceps revealing that the extent of the disease had not yet been reached. Both bones were softened, its compact structure greatly thinned, and consequently much less firm. It yielded readily to moderate pressure, and with the scalpel punctures could be easily made through it into the medullary canal. The periosteum could be detached readily from the surface, showing the bone to be of a cherry color. The medulla was somewhat mottled in appearance and in a semi-liquid state. An opening was next made into the middle third of the tibia, and a similar condition exhibited itself here. Continuing our exploration to the head of the tibia, to our astonishment we found the entire bone involved with the disease. Trusting to the knee joint for a limit we at once removed the leg at this joint, the saw cut through the condyles in an easy manner by only a few strokes, showing that still the disease existed in this part, and its true character was now too plain to be mistaken. The medulla here displayed a difference from what was found in the leg; there was more firmness in it, and it had largely encroached upon the spongy texture of the part, giving the bone a tallowy appearance. The articular cartilage was of a dull yellow color, and shading off from it the surface of the bone was of a dull pinkish hue. The stump was immediately dressed, the patient by this time was nearly exhausted by the severity of the operation and the time consumed to do the work. By careful use of stimulants she slowly reacted, and the stump healed rapidly, so that in five weeks she was able to use her crutches and walk the wards of the hospital. The healing process was carried on with less suppuration than I have ever witnessed in an amputation of such magnitude. At the outer angle of the cicatrix a small opening remained, not larger than an ordinary sized probe, through which ichorous fluid, like that in the foot, escaped, and this was her condition one month later when she left the hospital.

The above history embraces all the essential characters belonging to the best examples given us on the subject of mollities ossium. The disease has chiefly been met with in females who have borne children. Pain of a rheumatic character always attend it, and is most frequently observed to be located in the lower extremities. In a majority of the cases the urine displays a wonderful increase in phosphatic deposits, so much so at times as to present a doughy sediment. With our patient it was dif-

ferent, the urine maintained, while under our observation, a healthy standard. How are we to account for the pathological changes that presented themselves in these bones? The history does not embrace enough of the evidences of inflammation in the limb to declare it as the cause. It is true in inflammation of osseous tissues, as in the soft structures, that there is an increase of blood circulating in the affected portion, and this is followed by an absorption of one or both of its chief organic elements; most frequently the earthy portion is destroyed, and the remainder is so softened that naturally enough curvatures and displacements result in the more advanced stages of this malady. For the present we find no better explanation to offer than that given by W. H. Porter, in his contribution to the *Cyclopædia of Anat. and Phys.*, vol. 1, where he writes: "That it proceeds from a morbid state of the blood, and that there is a want of accordance between the secreting and absorbing vessels of the bones affected; if the earthy material is not secreted at all, or in insufficient quantity, or if it is absorbed too rapidly, mollities will be the consequence." Mr. Curling, in commenting upon this disease and the constitution of bone as shown by chemical analysis, which in one case "showed of the entire bone in 100 parts—of oil about 67, of membrane about 20, of earthy salts about 11; says sufficient evidence has been adduced to prove a peculiar constitutional affection, accompanied by softening of the bones, with thinning of their walls, and with the accumulation of adipose matter in their tubes and cells. To prove that the urine may be no guide in some cases, as a symptom of the morbid changes, we find recorded in vol. 33, *Med. Chir. Trans.*, on this subject, "that even when nothing peculiar has been observed in the appearance of the urine, there has been found after death calcareous deposits in various structures, as in Mr. Curling's case, where, after death, a deposit was found in the lumbar and iliac glands, and in one of Mr. Solly's, where he observes that, although earthy matter does not appear to have been present in the form of a sediment, the urine on analysis yielded three times the quantity of healthy urine, and on dissection phosphate of lime was found clogging up the calices and pelvis of the kidneys, forming there a solid calculus.

Had the bones of our patient been subjected to chemical analysis I have no doubt that we would have found the composition corresponding to that given by others who have made such tests. I

do not regard the local injury to the foot as having any share in producing so extensive softening of the bone, but simply representing a morbid constitution.

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*Report on Plasters, by the Section on Pharmacy, to the Academy of Medicine of Cincinnati.*

By J. S. UNZICKER, M. D., Chairman.

Plasters, although in use for ages, have nevertheless up to the present time, been open for still further improvements. Unimportant as this subject might appear to you, there is great importance attached to the physiological effects often produced by narcotic plasters, if made according to our present knowledge of pharmaceutical and chemical science.

Plasters are usually spread upon leather, canvas, muslin, or silk, and if well made, their value depends on the following characteristics :

1. In the cold it ought to be dry and hard, without staining the fingers.
2. When gently warmed, it ought to be easily compressible and slightly soften.
3. It must be sufficiently tenacious to adhere to the substance upon which it is spread, as well as to the fingers. This depends on the proper relations of the dry toward the liquid substances of which it is composed.
4. The ingredients of plasters must be well and intimately mixed, and of the best quality.

In the preparation of plaster, if the heat is too much elevated, decomposition takes place, or if long continued, may drive off all the volatile principles upon which the curative effects more or less depend.

If medicated plasters are made too hard, the active principles become fixed and can not act; this is easily demonstrated by using Empl. Cantharides of too firm consistence; it will not draw. I have applied such plaster and allowed it to remain for twelve hours without effect; then by remelting the plaster with one-fourth of Cerat. Resin. Comp. added, it drew without difficulty. Now to preserve the proper consistency of plasters they should be



placed in air-tight cans and kept in a cool place. Where this precaution is taken, they will keep for a long time without deterioration. The improvement in the manufacture of plasters—especially the medicated—has been gradually advancing with the progress of pharmacy, and I take pleasure in exhibiting to you on this evening, samples of Empl. Opii, Belladonnæ, Arnicæ, Aconite, and Athesivum, which are perfect specimens of art, and I do not think there is at present anything ahead of these medicated plasters either on this or the other side of the Atlantic. They were made by Mr. Charles Shivers, pharmacist, corner of Seventh and Spruce streets, Philadelphia, to whom the profession are under great obligation for his great devotion and research for many years in this special branch of his business, and for having furnished them with plasters easily adherent, light and pliable, and composed of excellent and effective material, so different from the old unyielding and hard plasters, spread on stiff leather or canvas. The difficulty of making medicated plasters extemporaneously is well known to pharmacists. Some purchase the plaster—frequently of doubtful age and composition—to be spread by themselves. The efficacy of such can easily be comprehended.

One of the specimens of adhesive plasters here exhibited was made nineteen years ago, and is of excellent quality yet.

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## Ophthalmological Department.

### *Two Cases of Tumor of the Brain with Optic Neuritis---Autopsy in each.*

BY DR. WILLIAMS, Cincinnati, U. S. (*Medical Record*, March 18, 1868.)

CASE I.—An Irish coachman, æt. 50, died after an illness of about six months. His symptoms had been violent pain in the parts supplied by the left fifth nerve, followed a few weeks later by a sudden attack of convulsions, succeeded by maniacal excitement. After this he had optic neuritis, blindness, and dilated pupils. There was bleeding from the left nostril, and the left side of face was somewhat swollen. The disc was swollen, blurred, and promi-

nent, and its veins much distended. It is said that the man had no positive paralysis, but he had bed-sores, and as his left eye inflamed, and the cornea became opaque, it may be conjectured in the absence of any statement on the point, that he had paralysis of the fifth on this side as a sequel to the hyperæsthesia. The man at length sank. The following are the interesting particulars of the post-mortem:

“*Sectio cadaveris, by Dr. W. H. Taylor, pathologist of the hospital, seven hours after death.*—Dura mater firmly adherent to the calvaria; membranes of the brain much engorged with blood; increased number of puncta vasculosa in substance of brain; two ounces of limpid serum in the lateral ventricles, which were much distended transversely; small amount of serum in the middle fossa. The anterior portion of the right hemisphere of the cerebellum was firmly adherent to the base of the cranium; and lying anteriorly to and below the right hemisphere of the cerebellum was a firm, oval, modulated tumor enveloped in a distinct capsule attached to but easily separated from the membranes. The tumor measured four and a half and three and a half inches in circumference in the two directions, and in structure resembled encephaloid. It had compressed the right half of the medulla oblongata toward the median line. Imbedded in the substance of the cerebellum, above and behind the solid tumor, was a pyriform cyst containing transparent fluid. It measured two inches in the long and one and a half inches in the short diameter, and its apex extended into the crus cerebri. The surrounding brain substance was of a semi-fluid consistence.”

CASE II.—Dr. Williams' second case is reported in much better detail than the first. A servant girl, aged 20, died after a two months' illness with severe cerebral symptoms. For some months before the date of its commencement she had, however, been liable to purposeless vomiting. Her severe symptoms set in suddenly; she became unable to hold anything in her hands; could not walk well or rapidly; failed in sight and hearing. In about a week she was quite blind, and her pupils were dilated and insensible; in this condition she first came under Dr. Williams' notice, unable to see, hear, or speak, and remarkably drowsy. Her pulse was 46 and irregular; respirations 15; extremities cold. The ophthalmoscope showed the discs swollen, opaque, and streaked with ecchymoses. After a month in the hospital the patient had improved somewhat. The right eye had now no perception of light, but she insisted that

her left was perfect, although on trial she could only read Snellen  $6\frac{1}{2}$  at 6". It was now ascertained that she had complete anæsthesia of the right side of the face and right eye. Her hearing and taste were now perfect, but there was some imperfection of sense of smell. She felt giddy, but could walk about the ward, and had no loss of motor power. She suffered from pain and heaviness over the eyes, but never in the back of the head. The pain was increased by any sudden motion. One morning (May 5) she had severe vomiting, and complained of great pain in the forehead. She became comatose and died in the afternoon. She had not had any convulsions whilst in the hospital.

The following are the chief facts of the autopsy, which was performed by Dr. Taylor:

"On removing the brain a tumor was discovered about three inches in length, lying under the left anterior lobe of the cerebrum, and extending from the falx cerebri, to which it was adherent, over the cribriform plate to the ethmoid, involving the left olfactory nerve, backwards and diagonally across the sella turcica to the right petrous bone, where the end of it pressed on the fifth nerve of the right side at its point of exit from the posterior fossa of the base of the brain. There was thus direct pressure on the left olfactory, the optic chiasm, the cavernous sinus and ophthalmic branch of the fifth nerve, as well as upon the main trunk of the trigeminus, at the seat of the Casserian ganglion. The posterior part of the tumor extended across to the right side, about an inch beyond the median line, producing a corresponding cavity in the right side of the brain. The posterior two-thirds of the tumor were very soft and red looking, very much like brain tissue in a state of red softening. The anterior one-third was about the size of a walnut, hard, pale, nodular and scirrhous in its character. When the brain was laid on the table, the tumor projected nearly an inch beyond the end of the anterior lobe. The loss of smell in the left nostril, and the complete anæsthesia of the right half of the face, receive a ready explanation from direct pressure. The impairment of vision was due to a threefold cause—direct pressure on the optic chiasm; compression of the cavernous sinus, and obstruction to the venous return from the retina, giving rise to neuro-retinitis; and thirdly to increased intra-cranial pressure."

Dr. Williams directs attention to the fact that although the fifth nerve was quite paralysed for some weeks, yet no inflammation of the cornea followed. At one time the conjunctiva became con-

gested "and the eye painful," but on use of a protective bandage the irritation passed away. If the eye became painful during the congestion, we must object that it is probable that the paralysis was incomplete. In cases of absolute anæsthesia the eye may go through all the stages of destruction without the patient ever having the slightest sensation of pain.

Dr. Williams records a third case of optic neuritis, in which the diagnosis of cerebral tumor was given, but as the patient is yet living the case is of less interest.

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## Editorial.

*The distinguished Dr. Benj. W. Dudley* died at his residence in Lexington on the morning of January 20th, in the eighty-first year of his age. We hope at an early date to make a fuller and more worthy notice of this distinguished surgeon.

*Dr. John W. Carnochan* has been appointed Health Officer to the port of New York by Governor Hoffman.

*California Medical Journals.* We have received a notice of the consolidation of the two San Francisco medical journals. We had hoped this was true, but we at once receive both journals in full blast of energy and latent ill will. Who is to blame we don't know, but the medical interests of any leading point can often be best subserved by concentration on a single good journal, and thus forcing cliques and factional interests into subserviency to the general good.

*Dr. Alex. J. Stone* proposes to issue a new journal to take the name of the *Medical and Surgical Journal of the North-west*, and to hail from St. Paul, Minnesota. Price \$3; 32 p., monthly.

*Fougera.* At 30 North William street is prepared a great variety of things of interest to the profession: Fluid extract of castor oil, iodinated cod liver oil, Liebig's extract of meat, etc. We commend these matters to our friends to inquire about.



*The Ohio Dissecting Law* is being earnestly pushed, and we hope will become a law. We need this fostering care, the people need it, and we trust our readers in Ohio will draw every cord on their representatives to secure correct action.

*Annual Report of the Surgeon General of U. S. A. for 1869.* The report of General Barnes shows the details of the financial affairs of the Medical and Hospital Department of the United States Army for the year ending June, 1869, with great fullness. The report of the health of the troops is stated to have been uniformly good. The surgical records embrace a vast amount of additional histories of injuries and operations. The Army Medical Museum has been augmented by valuable additions and collections. There are only two vacancies of Surgeons and forty-two vacancies of Assistant Surgeons. The Surgeon General expresses himself highly satisfied with the plan of organization of the medical staff of the army, though, by no means, so strong numerically as in the British service.

*Illustrated Catalogue of Flowers, Seeds, Bulbs, &c.* Mr. Vick, of Rochester, New York, has repeatedly placed the editorial fraternity under obligations by the prompt supply of varied seeds and bulbs, and by his elegant catalogue; that for 1870 is now before us, and we advise our readers to send for it now, so as to select orders for their floral display and culture next spring.

*The Ledger Almanac.* Mr. Childs has issued 80,000 copies of his Almanac for distribution amongst the subscribers to that newspaper. We hereby express our thanks for a copy.

*Longview Asylum—Tenth Annual Report.* The beauty of execution of this annual report is decidedly typical of the neatness and taste which pervades the Asylum itself, and gives one a renewed suggestion of the correctness with which Dr. Langdon conducts all its affairs. The gross expenses of 1869 were \$147,999, this, however, includes nearly \$33,000 on building and improvement account. The capacity and resources of the institution have been unusually taxed to meet the necessity of providing for the patients of the Central Asylum, thrown out by the burning of that building. During the year ending the 1st of November, ult., there have been treated 759 patients; of these 179 have been

discharged cured. The improved, unimproved, dead, etc., reduce the number remaining in the hospital to 511. There are the usual varied statistics pertaining both to the special condition of this Asylum and the general subject of insanity. Our State has great reason to be proud of Longview Asylum and its management.

***Toland Medical College, San Francisco.*** Prof. L. C. Lane delivered the valedictory November 4th ult. It is an unusually good and appropriate address. In all these parting addresses there is much of sameness, still, when the mother bids her boy that same old, familiar word, "Good bye, God bless you," of to-day, it has the same tenderness and meaning, the same hopeful prayer, as the brave Spartan mother who gave the shield to her boy with, "with it or upon it." Our old friend Dr. Lane has given to the class brave and encouraging words. We hope they will be a shield to his boys.

***The Hemp Plant, its Medical Activity.*** Prof. H. C. Wood, Jr., of Philadelphia, has instituted a series of experiments to show that our American hemp has, to a marked degree, the same peculiar properties as a brain stimulant and narcotic with the Indian variety. We thank Dr. Wood, because, as we believe, such experiments contribute to our true progress in *materia medica*.

***Arrears and Dues.*** With the beginning of this year we run the pencil unhesitatingly over the names of one or two hundred doctors who thought to read this journal at the expense of the editor. We dislike to part company from old friends, but we are very anxious to build a *new office*, and, until this is done, we can not afford to contribute very extensively to the professional training of the West gratis.

Our thanks are heartily due the prompt and large response made to bills sent out with the end of the year 1869, and we take this opportunity to request speedy payment on the part of others in arrears. It is best for all parties to draw the line closely toward a cash basis, and this we are determined to do.

***Cincinnati Wines.*** Some time ago we called the attention of our readers to the quality of Mr. Thompson's wines. We are glad to note the legitimate appreciation of these wines abroad.

In a recent number of the *Philadelphia Reporter*, we find the editor gives them a proper and favorable notice. Those of our readers who wish to test the purity of these wines, should address No. 76 East Third street, Cincinnati, for a price list.

**Portrait of Prof. Gross.** The publisher of the *Philadelphia Reporter* has issued a beautiful portrait of this distinguished American surgeon. He would have been the surgeon of Cincinnati and the West, but we wouldn't keep him, and Drake, with his foresight of future values, carried away from us Gross, first to be an ornament to the profession of Louisville, then for Philadelphia. He is, however, become national property, and we now claim our share of the inheritance.

**The Pharmacy Bill.** The regular medical profession is so closely interwoven with the pharmaceutical, that whatever tends to improve or elevate the status of the latter must be of peculiar interest to the former. At the last meeting of the American Pharmaceutical Association a form of a law [or bill] was adopted, which it is designed to urge upon the attention of each legislature of the several states, so that we may arrive at a uniform law controlling and protecting the practice of pharmacy in the United States. The chief feature of the proposed bill is a system of *general registry*, so that no one shall be permitted to conduct the business of dispensing drugs and preparing prescriptions except he have given evidence to the proper Board of his fitness for his calling: the chief assistant also, the one upon whom devolves the actual compounding and dispensing of medicines must have passed this Board. There are several other details adding to this completeness and efficiency of the law, but from its length we can not give it in its fullness, but refer any of our readers interested to the Nov. No. of the *American Journal of Pharmacy*, where the bill is given in full, and also the debate upon its merits in the Am. Phar. Association meeting at Chicago. We hope sufficient influence will be brought to bear upon the legislature of Ohio this winter to adopt the law at once. Then we trust there will be sufficient *esprit de corps* amongst the pharmacutists of Cincinnati to establish the *School of Pharmacy* so long talked of, and so evidently demanded.

THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Original Communications.

*"Medical testimony, when of any value, can be little else than reference to authority."*—Prof. C. A. LEE.

*The Duties of the Medical Witness, and his Privileges.*

Introductory to course of MEDICAL JURISPRUDENCE and MENTAL DISEASES,  
as delivered during session of 1869-70, of Medical Colleges.

By Prof. D. A. MORSE, M. D. of Danville, Illinois.

[THE following lecture, together with those upon metaphysical subjects, nervous and mental disorders, and their legal relations, are submitted for publication, with the object of presenting in a clear and concise manner, the present literature of these subjects, which, if *well studied*, must be followed through the numberless pages of many volumes, many of which are not accessible to every reader, and some of which have not been translated into English. They discuss from the standpoint of the "correlation of forces" the relation of mind to matter—the relation of nerve action to nerve integrity, illustrating the mental conditions that obtain in idiocy, imbecility, dementia, and the varied forms of insanity, as well as the nature of the so-called functional nervous disorders: epilepsy, hysteria, and chorea, etc. They will embrace the principal points that the writer desired to present in the articles announced in the LANCET of February, 1869, as forthcoming during

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the present year. In presenting these subjects, matter *that has been used in common by several writers*, has been used without giving the authority of any—but where matter has been presented, that is not common property, it is credited to its author.]

GENTLEMEN: In entering upon the study of any science, or especially upon any branch of that which so intimately concerns yourselves—MEDICAL SCIENCE—it is proper that you ask of what value is it to me in a *practical* point of view? What application can I make of it in my daily routine of duties as an humble follower of that laborious profession so eminently characterized by its devotion to the interests and welfare of humanity?

Want of time, as well as the extent of the subject, will permit me to present to you no more of MEDICAL JURISPRUDENCE and MENTAL DISEASES, than the outlines, yet these will serve to guide you—shall stand as *landmarks* upon the border, from whence you shall begin the survey of a subject rich in literature, rich in facts, pregnant with interest, deeply concerned in the welfare of the individual, and of nations, and which in importance is exceeded by no branch of medical science.

The venerable Dr. Rush, who was one of the fathers of legal medicine, expressed his views to the class in one of the Philadelphia medical colleges, in reference to comprehending the importance of a knowledge of medical jurisprudence, and subjects connected therewith, as presented in his course, as follows: “I beg you to recollect the extent of the services you will thereby be enabled to render to individuals and the public; fraud and violence may be detected and punished; unmerited infamy and death may be prevented; the widow and the orphan may be saved from ruin; virgin purity and innocence may be vindicated; conjugal harmony and happiness may be restored; unjust and oppressive demands upon the service of your fellow-citizens may be obviated; and the sources of public misery in epidemic diseases may be removed by your testimony in courts of justice.” The importance of a thorough application of medical knowledge, in this manner, was, when Dr. Rush, in 1810, thus expressed his views, not appreciated as at the present time, yet from that time to the present has its just claims been acknowledged with steadily increasing appreciation by the legal profession, the medical world, and the general public.

I shall not weary you with a history of the struggle through which the early defenders passed to establish the claims of legal

medicine; the ridicule, opposition, and want of courtesy from their fellow-men. It is of but recent date that medical colleges have commenced to establish chairs of medical jurisprudence. I have furnished you with a list of some of our valuable writers, yet by no means an extensive one; and I hope from this you will gain no opinion other than that this science, so worthy of development, is yet in its infancy. But though in its infancy, like the human infant, requiring long years of careful nursing and tender care in its helplessness, when a little matured it strikes down all opposition and becomes a giant force for good or evil, as it may be directed.

The fact having been repeatedly demonstrated, that without medico-legal testimony, the ends of justice can not be met; that gross crime stalks abroad in the clear light of a noonday sun unpunished; that startling and dangerous evils are undiscovered and without remedy, except by it, has caused a higher appreciation of its merits, a more thorough understanding, and a thirst for still greater perfection of the knowledge of the duties, rights, and privileges of the medical witness.

I will, before entering upon the details of our subject, endeavor to present you with an intelligent definition of it, and a brief consideration of its application. This is required of me, that I may present to you more forcibly "THE DUTIES OF THE MEDICAL WITNESS AND HIS PRIVILEGES," announced as our introduction to this course.

"Medical jurisprudence," as defined by Chitty, "is the science by which anatomy, physiology, pathology, and surgery, and their collateral branches, are made subservient to the preservation of public health, and the protection of the person from injury, and to the formation, construction, elucidation, and administration of the laws relative to the same subjects; and it therefore resolves itself into *two* great divisions, namely: into forensic medicine, comprehending the evidence and opinions necessary to be delivered in courts of justice, relating to criminal and other matters to be there determined; and, secondly, into what has been termed MEDICAL POLICE, embracing the consideration of the policy and efficiency of legal enactments and regulations, for the purpose of preserving the general health and physical welfare of the community. It combines as well an acquaintance with so much of medical science as is necessary for the elucidation of legal subjects and a knowledge of the existing law, and the rules of evidence as applicable

in all cases where medical science and its subjects can become the objects of inquiry in courts of justice. It is a combined view of the two sciences of law and physic, showing their mutual relevance."

To show well, we may add, their mutual relevance, and to exhibit the nature of medical learning and of legal learning—the evidence of medical and of legal facts—the authority of medical and of legal opinion, this combined view must be clearly displayed. To illustrate more clearly the application of medical jurisprudence we may further say, that it is an application of so much of the general principles of common law as relates to questions that require the light of medical science to interpret them and aid in their application. This is illustrated better than I can express it by Mr. Wharton, in a foot-note to the case of *Cattrell and Mason*; he says, in reference to the common law being based upon the sciences, that "the common law has been defined to be the statutes worn out by time; it may more properly be treated as the *precipitate* of the wisdom of all ages, all professions, all countries. If a question is to be tried involving the most delicate point of mechanism, the testimony of experts is taken; and what they declare to be the law, philosophy the judge, declares to be the law of the land. If a question of marine right is to be determined, the mysterious laws of the sea are invoked, 'the sweet influences of the Pleiades and the bands of Orion,' and as taught by science, they become a part of the common law. And so on trial where the question at issue was whether a certain species of fish was able to surmount obstacles by which a river had been dammed up by parties interested in the cultivation of the soil, it was held that the observation of scientific men, versed in this particular topic, were part of the common law for the specific case; and that, therefore, naturalists, who had given attention to the habits of this fish under such circumstances, could be called to give their opinions on the merits."

Hence, we perceive that while the common law is the sum total of the laws which govern all sciences, and that its rules are not peculiar to medical science alone, but that they are applicable to all cases where the question is one depending on skill and science in any department. The testimony of experts is necessary to settle obscure questions that lie beyond the scope and observation of men in general. Thus, the opinion of a watchmaker would be of much greater value upon the degree of skill manifested in the

workmanship of any particular watch, than that of a piano builder, though he had received medals from all nations, and wore the too liberally bestowed cross of the legion of honor. The opinion of a medical expert would be of much greater value, upon the nature of a wound in a supposed case of homicide, as to whether such wound was an adequate cause of death, than would that of a lawyer, though he had been crowned with laurels and seated upon the pinnacle of the temple of honor, in his own profession. This same applies to all professions and to all sciences. Persons who have given their whole attention to the cultivation of the knowledge of any subject, who have had extensive and continued opportunities for more exact observation, are entitled to respect in their opinions above those of persons who have had less frequent opportunities for observing the truth of any fact that should be brought frequently and habitually under their observation, to render their opinions valuable.

Having illustrated sufficiently the *definition* and *application* of legal medicine, we are prepared to discuss the main points embraced by the subject of the lecture.

The expert, or as he has been termed, the *skilled witness*, in medicine, of all experts, is called to sustain the most creditable appearance before the eyes of men under the most awful responsibilities, under the most rigid and exacting codes, under the eagle eye of a learned judge, an able and efficient counsel, to bear scrutiny the most penetrating, with unswerving integrity, unblemished honor, and undaunted courage. There will he drag forth from darkness and hold up to the gaze of a curious and unsympathizing world *truths not taught in books*: lessons of high life and lessons of low life; lessons of wickedness and lessons of goodness; lessons of courage and lessons of cowardice; lessons of faith and virtue; and lessons of falsehood and crime; lessons of the heart and of the mind; lessons drawn from tradition, from pleasant observation and the most heartrending, bitter experience. Whatever sacrifice of personal feeling, whatever ties of well-cemented friendship it may sever, whatever confidence reposed it may violate, he must ever be prepared to deal with questions that involve life and property, character and reputation, as though he stood in the presence of the all-powerful Deity. Unlike the *common witness*, who testifies to what has passed under the limits of his own vision, the medical expert must testify in a case of which he has had, perhaps, no previous knowledge. He will be required, certain



facts being given relative to a *supposed* case, to give the general principles which shall govern the jury in their application to the case in question. *Supposed*, or hypothetical cases, will form the general character of those upon which his opinion will be required, and he will be expected, by his impromptu evidence, to unravel their *mysterious* principles, to cut the Gordian knot that confines them, in order to allow their appropriation by court and jury.

The medical witness should, therefore, be possessed of a well-arranged, thoroughly-digested, extensive knowledge of all points that may possibly arise under any course of inquiry an examination might pursue. If it relates to *disease*, he must not only be familiar with its characteristic phenomena, but must be able to indicate wherein the condition in question may deviate from health, and *the general results*, from its termination under any plan of treatment adopted by his profession. By this I mean, whether permanent cures are effected, or whether it lapses into a chronic state, and thus becomes incurable; or whether it runs a rapid course, terminating in death; whether it be a disease relieved only by heroic measures, or whether usually terminating under the administration of doses infinitely less than nothing. Physicians have been compelled to answer to an action for damages when measures have been adopted that, though hazardous, alone were sufficient to save life. The expert should be familiar with the rates of mortality of disease, as well as the results that may obtain that are beyond the power of human art, skill, or science to prevent. In phlegmasia dolens, and a large number of diseases, there is a tendency to result in imperfect cures, however skillfully managed the case may have been. I have in my mind, at present, a physician of well-merited reputation, of Ohio, whose fair fame and character were dishonored, and he ruined, by the results consequent upon three cases of phlegmasia dolens. He should have forewarned his patients of the results that would follow. In these cases the expert must be extremely charitable in his application of his principles of science, where the defendant is a well-qualified man and one competent to handle critical and dangerous cases—to handle dangerous and powerful remedies.

If an examination relates to *surgery*, he must also be well informed as to the results that may follow the best adapted surgical practice. It is not enough for the expert to be able to state that a limb which has been fractured, remains shortened, or distorted, but he must be able to state the relative frequency of this

result in the hands of those having acknowledged ability to treat such cases successfully, lest he testify contrary to the established rules of his profession—an *unpardonable mistake*. He should be familiar with the tendency to death of parts from injury, from inflammation, or from mortification. He should be able to distinguish between the liabilities of different parts to unfortunate results from injury—between severe and grave causes and those of little importance. Thus, if in a supposed case of fracture of the bones of the forearm, occasioned by a fall from a swing, in which bandages applied were allowed to remain for many days, the arm swelling, causing intolerable pain, and at length death of the hand, the defendant sets up the claim of its being the result of inflammation, or of erysipelas, or of any other cause, you will be able to distinguish between the results of a fracture and that of strangulation of the parts. Death of the parts, or even any severe inflammatory symptoms being far from the usual result—no rules of any system of surgery under heaven permitting such course of treatment. The youngest tyro in surgery would brand such a surgeon as an imposter, or consign him to a mad house. For there being no liability to destruction of the parts from the injury, but great liability from strangulation caused by swelling, even though a bandage may have been loosely applied before swelling commenced, you can at once declare such surgeon ignorant and incompetent who allows a limb to become disorganized without even a suspicion of such result.

The expert must always remember, that in all cases where no degree of skill is specified previous to the treatment of a case, more than “ordinary” skill is not required: *that is*, the skill possessed by those of his profession, in his vicinity, who are recognized as being men of good standing with the general profession. The great lights of a metropolitan city are not the standard by which skill shall be measured, except when *extraordinary* skill has been contracted for, which must have been expressly stated. The expert, when testifying relative to treatment, must only apply that which is the most recent, that adopted by previous generations not being the standard to be applied. A physician or surgeon can not be held responsible for a higher degree of skill than he contracts to bring to bear in a case, but the expert can declare whether a defendant has rendered with due diligence and attention this degree of skill.

The true character of doubtful and obscure cases can not be

recognized at a mere glance, and intricate and difficult questions solved, and every shade or tinge of disorder portrayed; but the most careful study of the healthy operations relative to any case in question must be understood. Of what value would be the opinion of a witness upon a chain of evidence adduced to prove a case of insanity if the witness knew not the operations of the mind in health?

In relation to *evidence*, there are many points that are beyond the province of the witness to settle. These the court will decide; but the privilege of the witness to become acquainted with the general rules of evidence is beyond dispute. It is his duty to acquaint himself with so much of this subject as will enable him to prevent misunderstanding from constantly arising between him and the court, and those constantly recurring annoyances and vexations that tend so much to lessen the weight and influence of his evidence. It is not necessary for him to read Phillips, Greenleaf, and Starkie; the commentaries, monographs, statutes, and State reports, but from any one of the first, borrowed from some lawyer, he may learn rules of evidence and obtain knowledge that will serve his purpose throughout all subsequent life.

Admitting then, that as a witness, you are possessed of all qualifications essential to an expert; however well prepared you may be you will be retained, in all probability, to serve the interests of but one party. That party will expect you to give evidence as they desire. The witness is, to all appearance, the property of the party who summoned him. The counsel look to but one side of questions, and as a natural consequence, exert themselves to cause the witness to express their views. The medical witness, though he may feel flattered by the preference shown him in retaining him as a witness, should never forget his manhood and independence; and whatever sympathy may thus have been engendered, he should never depart from a stern conviction of truth. Let him shake off every vestige of prejudice, and, freed from the evils and tendency to distort truth, attaching to a prejudiced witness, tread upon the witness stand as upon "holy ground."

Young witnesses, and those who testify but seldom in court, have a great dread of being thought ignorant, and may thus be led to express views that better judgment would not have hazarded. If uncertain, and therefore unqualified to express an opinion, let him express respectfully his doubts or his inability to answer, and the

self-respect he will thereby beget will give him much greater weight and influence as a witness by increasing his self-esteem and confidence. The witness having expressed himself in an unguarded manner, will be open to censure, if not subjected to subsequent embarrassment. His opinions will be expressed with hesitancy, and hesitancy always begets the suspicion of ignorance and incompetency. It is never expected that without previous knowledge, or special preparation, a witness shall be always prepared to express an opinion upon obscure points. The judge upon the bench, or the counsel at the bar, would never in a single instance hazard their reputation by committing themselves in this manner, but always present their opinions as the result of deliberate and mature reflection, careful and thorough research. Why should the medical man hazard his reputation in a case where, perhaps, life and death may hang upon his evidence, without reflection? The counsel, often ignorant of the signification of professional or technical terms, attempt to force the witness to present opinions upon points when they are incapable of using language sufficiently clear to convey any idea of the point they desire to be enlightened upon. It is not the duty of the medical witness to act as brains for them to furnish information to be used to annoy himself, yet he had better throw light upon all obscure points relating to the case. The witness, as a privilege, may insist upon having every question plainly and fairly stated, and and he should never attempt to give a reply to questions that he does not fully understand, but insist upon having it so stated that he can comprehend it, lest he leave the impression upon the jury that he is unacquainted with the subject, or open the way for his own embarrassment. The counsel are employed to serve their client, but the witness to serve the common cause of truth, and it is his duty to reply to nothing he does not understand, and to leave no point of which he is not assured he is clearly understood. The lawyer views matters from the standpoint of his client, the witness from the standpoint of scientific truths. He is not bound in common with the interests of either party to a suit, nor should he previous to a trial inform the counsel who may retain him, that he can testify to favor the merits of either party, but be guarded, lest he present his opinion upon but half a case—a condition that will add to his mortification and embarrassment in court—when new light is thrown upon the case by further evidence. The witness should be on his guard against the attempts of learned counsel



to present a supposed case so nearly like the case in question, in its leading features, that his evidence or opinion, based upon this statement may be construed far differently from what he intended. Counsel often attempt to draw opinions upon an abstract idea, or isolated fact, that may not have the slightest relation to any grounds sufficient upon which to base an opinion. Thus, a single feature of a case may be presented for his opinion as to whether it proves insanity in a given case. A witness may have in evidence detailed many appearances that *collectively* would prove a case of insanity; yet, in all cases of insanity appearances may be detailed that are peculiar to a healthy mental condition. The counsel may select one of these last-mentioned appearances and ask the expert his opinion as to whether *that* constitutes or proves insanity. Now, gentlemen, if you reply categorically, yes or no, you will probably get into trouble. You should keep in mind that the counsel ask no questions that have not an object, though you may be unable to perceive the object they desire to accomplish by a certain question. If you have stated that the appearances as given prove a case of insanity, and afterward state that, when questioned upon one of them, it does not, your evidence may be misapplied. In this case let the witness state clearly that by no one feature of the case has he arrived at his opinion, but that the whole facts are necessary to determine the case. It would be better to firmly decline answering, or to give an opinion, than to give it upon an isolated fact.

Lawyers are disposed to annoy witnesses greatly by asking definitions of subjects that can not be defined. This may be to annoy and embarrass, or it may be to test the ready knowledge of the witness, his general knowledge upon the point in question. In the science of medicine there are many points that are yet obscure of which no definition can be given, for to define them correctly removes the obscurity that envelopes them. You then express what the subject precisely is. Thus, if asked to define insanity, you will be unable to do so, for to define it correctly you state precisely what it is, which science has not yet positively determined. It would be better to state that these points can not be defined, than to be drawn into a discussion with the counsel, a thing which should be always avoided, as by a discussion the witness has nothing to gain, and the counsel has nothing to lose, however much at random he may fire, his own reputation will not suffer—the witness will be compelled to retreat in disorder if not in disgrace.

Counsel will frequently attempt to weaken the force of an opinion given relative to a particular case in question by trying to make it appear that the case is but one of Nature's freaks, and consistent with the general mental condition of mankind. To accomplish this, they will perhaps ask if all men are not insane. Here great forethought should be shown before a reply is ventured; and great care should be exercised to distinguish between the short-comings of nature, the old Adam that is innate, and well-constituted disease. It will be impossible for you to state where health terminates and where disease begins. The symptoms of disease are common to a large number of diseases, and no *one* reveals the true nature of the case. All the incidents—all the facts presented *in evidence*—must be well digested and an opinion derived from the whole.

Different witnesses state the same fact in a different manner. It is a truth, notorious, that of ten men who have witnessed the same occurrence, no two will give the same statement. Discrepancies and contradictions will arise in all cases. Hence, good common sense is an essential qualification for a witness to possess, that he may be able to keep in mind the general character of the evidence and make all due allowance for the defects of the *common witnesses*. The expert must make the same allowance that governs all evidence. If witnesses conflict, the expert must remember that the whole evidence alone will justify his opinion, and if this is so contradictory that he can arrive at no correct opinion, let him so state to the court. Let him state that the evidence of this one proves *this*, and the evidence of that one proves *that*, and, if possible, give to the jury the rule that will apply, *but do not attempt an opinion upon the merits of the evidence*, for with this you have nothing to do. The jury alone must decide upon the credibility of the witnesses. The expert can give his rules of science as applicable to either portion of evidence, in case the jury decide that this portion preponderates.

A point, of late, is much discussed in some places, whether a witness should testify upon any points other than those upon which he is questioned. Concerning this there can be no question that the general moral obligation is not binding to tell *the truth, the whole truth, and nothing but the truth*. It is the object of evidence to relate facts that shall enlighten the jury, and furnish them means of arriving at a correct view and opinion of a case. A counsel is not presumed to know all the facts a witness may have in his possession, and consequently he may be in possession

of many points of vital importance to the case at issue which are not expressed because he had not been questioned upon them. Beck says it would be a rule worthy to adhere to in many cases, for the witness to confine himself to the points embraced in the questions. Yet it is to satisfy the ends of justice that examinations are made, and no witness can conscientiously conceal truths of which the court should have possession. It is not the duty of the witness to weigh his evidence with reference to the effect it may have upon the case at issue. With the *effect* of his evidence he has nothing to do whatever, but should make open, honest, candid statements, and let the results be as they may.

Any person who has filled the witness box in an important case, can testify of a truth that it is not a pleasant position to fill. The great desire he may have, from his sympathies with a defendant, to see the case progress to a favorable termination, wrings his heart when he is forced to assert facts and truths that will change the whole feature of a case. Some of our authorities state that a witness need not state all these facts unless the counsel ask them; that to answer only the questions asked performs his high duty, and acquits him of all violation of moral obligation. This is ventured on the ground that lawyers delight to draw the truth out of a witness. And Beck states in reference to this point: "It is a labor they delight in, which not only physics *pain*, but is very sure to physic the physician."

The expert is not responsible for the *use* that may be made of his opinion; he only is responsible for the *correctness* of it. He is under obligations to speak the truth, without consideration of its effect, whether it opens the door of the prison-house that the prisoner may go free, or whether it closes it upon the prisoner forever. Smith, in his Forensic Medicine, says: "The witness ought to put the court in possession of all the facts, even if he be not questioned to that extent." Beck says it is the business of the lawyer to draw it out, but that facts not drawn out in an examination should be stated to the court at the close of the examination or cross-examination; that the desire often manifested by witnesses to hold back a portion of their evidence is extremely disgraceful. Every one must have often witnessed, if often in court, the truth of an expression once made in a plea by our distinguished Bob Chesley, of Danville: "There is . . . he is a pretty nice kind of a man. I pity him—he *will not swear to a LIE*, but the trouble is, *he will not swear to the TRUTH*." Witnesses often excuse themselves



for having held back evidence in this manner. I would advise you to do no violence to your own conscience, but choose the course your obligation as a witness dictates.

A few more points remain, connected with the subject, of which it is necessary to speak. One of these we have already indirectly alluded to: *that an expert is not permitted to give his opinion directly upon the case as submitted to the jury*, but must confine his opinion to the state of the facts presented in evidence. Thus, if evidence be adduced to establish a case of insanity, the witness can testify that in his opinion the evidence, or appearances, are such as characterize insanity—that they are symptoms of insanity—but the jury alone can decide upon the case whether the party in question is insane. Thus, in one of our works upon jurisprudence (Beck) is given a case in which the witness testified, that in his opinion the prisoner was of unsound mind. (“From all that I have heard to-day, and from my personal observation, I am satisfied the prisoner is of unsound mind.”) He was sharply rebuked by Baron Anderson, presiding, who added: “*I will not permit any medical witness to usurp the functions of both judge and jury.*” The witness should have stated that the evidence adduced proved a case of insanity. Thus, to illustrate this, if in a given case several witnesses come into court and testify that a certain person exhibits certain symptoms, which may be or may not be those of insanity, the witnesses state what they have seen. The medical expert is called upon to state what these symptoms indicate—whether they constitute a case of insanity. Please bear in mind, gentlemen, that he is not allowed to say that he does not believe the witnesses, or that they exaggerate or misrepresent the symptoms, but he must decide that the symptoms do or do not constitute a case of insanity. The judge presents in the instructions of the court to the jury the evidence of the expert as the law that shall govern the case, if the jury determines that the witnesses have testified correctly. The jury decide upon the truthfulness of the common witnesses, and then apply the evidence of the expert, or not, as they may think the evidence of the common witnesses justifies. The jury must, however, be guided by the evidence of the scientific witness if the credibility of the witnesses is established. Hence, you see that the expert is a walking encyclopedia, driven into court to be mused over and examined with reference to scientific truths, as the court turns to his books of law to instruct the jury. He is a living law book of common law, that must on all occasions



open to page and section, and expound the laws of science, that it is desirable to apply to the case in question.

Other points remain to be examined, as to the introduction of books; the privileges of the medical witness as to secrecy; and death-bed confessions. The medical man frequently wishes to fortify himself against assaults by the introduction of standard authorities upon the points at issue, by their views to show that his own are sustained. Books have been and still may be admitted if no objection is made to them, *but the rule is, that all books shall be excluded.*

Chief Justice Tindall, in a case where books were desired to prove that a dose of medicine administered was too large, objected to them, but said: "I think you may ask the witness if he has found this laid down as a rule in the course of his reading." The class will readily comprehend the necessity for this. "Great men will differ in their opinions," and witnesses might produce works to substantiate almost any form of error. All authors would not, upon the witness stand, substantiate by their oaths what they have written to maintain some controversy. This is better illustrated by the ruling of Chief Justice Shaw, of England, in a case of insanity, when the attorney, in opening the case, wished to read a definition of insanity from works upon the subject. He objected by saying: "Facts or opinions on the subject of insanity, as on any other subject, can not be laid before the jury except by the testimony under oath of persons skilled in such matters, whether stated in the language of the court or of the counsel in a former case, or cited from the works of legal or medical writers, they are still statements of facts, and must be proved on oath. . . . The more recent English authorities are against the admission of such evidence."

The lawyer reads his law in making his plea, partly to fill up time, in part to give the idea of extensive wisdom, and *sometimes* to enlighten the mind of the court, but like the medical witness, he can not introduce his books as *evidence*. "Law may be read to refresh the mind of the court, but not as evidence."

A witness who is master of the opinions of authorities may present them as his own, under oath. A witness may reach his conclusions from what he has read, from the opinions of authorities, but when introduced into court, all opinions presented must be his own. Lawyers, when a witness has made a statement, frequently ask him his opinion of an author, and then use the author to show his evidence does not coincide with it. Though medical men in

general protest against the exclusion of books, as gross injustice, we see that in reality they have no just cause for complaint. (Elwell.) They can present their own views, refreshed and influenced as much as their own consciences will permit, by the works of the great masters. Their own views, presented under oath, has preference over them.

Another fact referred to, is that of *secrets* relating to matters and facts obtained while the witness is acting in his professional capacity. In England, the medical witness may be called upon to divulge secrets intrusted to him in a professional capacity. It has, says Beck, been there solemnly decided that medical men are bound to divulge these secrets when required to do so. The law of France is opposite, except to crimes that will endanger the safety of the state. In several of the states of the Union enactments require that "no person duly authorized to practice physic and surgery shall be allowed to disclose any information which he may have acquired in attending any patient in a professional character, and which information it was necessary for him to have to enable him to prescribe as a physician, or to act as a surgeon." Numerous cases are reported in our works that illustrate the application of this, which I have not time to present to you. In criminal cases the rule of evidence is, that a man shall not be required to criminate himself, nor a third party not a party to the suit. In Ohio, the rule in civil cases differs from this. A party to a civil suit may be required to testify, even though it be to his own disadvantage. A witness is not allowed to withhold evidence, though it be a sacrifice of his interests to testify. In civil cases the physician may be called upon to testify, as all other witnesses, subject to the same rules and in the same manner. As a *common witness*, the medical man should be clear and concise in his testimony; he should avoid all show of his professional character, and use only the simplest language that will express his ideas. As an expert, he may be required to use professional or technical terms, as there are in many instances no corresponding common term, but he should then aim to explain it as well as possible. In reference to secrets obtained in his professional character, all authorities unite in saying that professional men should receive as few of them as possible. Do not encourage patients to unvail all their secrets to you upon every occasion, for then having none of them, you will have to reveal none.

The profession are very tender upon this point of privilege, and

many are the expressions of writers by way of protest. Prof. Charles A. Lee says: "We believe it to be the moral right, and the duty of all medical men, to refuse to disclose, in a court of justice, secrets intrusted to them in professional confidence, and we have always acted on such belief. If physicians become the repositories of secrets, under the full conviction on the part of society, of our moral and professional obligations to hold them sacred, secrets which otherwise never would have been revealed, who can believe that there is any earthly power which ought to wring them from us, or which can, if we rightfully understand our privileges and duty? If private confidence is thus to be broken in upon in every imaginary necessity, where is the end to the mischievous consequences that would arise, especially at this day when every trial is published to the world through the medium of the press? The lawyer is shielded from the obligation of revealing the secrets of his client on the ground that it is necessary he should be acquainted with the real facts in the case, for the purpose of conducting the defense, and because life and property are at stake. But we ask if character and reputation are not of equal value? And whether either of the former can be enjoyed without the latter? So also it may be observed that the patient communicates freely with his physician for the purpose of judgment; no circumstances whatever will warrant their publication to the world. In the case of females, such a disclosure would be in the highest degree indelicate, and often worse than any punishment that could be inflicted."

Elwell, in his work upon malpractice, takes a contrary view—that entertained by the common law. The discovery and punishment of crime and the maintenance of truth, are the objects of courts of justice, and when criminals are shielded by privileged witnesses, who retain within their own breasts evidence that would throw light upon cases at issue, the object of the law is defeated. In the case of the lawyer but one party is recognized, and that becomes in a measure subject to the law by being privileged in nothing except that the attorney and his client are regarded as constituting one party to an action. In other words, there is no party but the attorney, for he represents fully his client. The party is regarded innocent, and the burden of proof of guilt rests upon the offended party and not upon the offender. The attorney, aside from the professional relations held to his client, has no privileges that the medical witness does not enjoy. Personally he



is not privileged, for he may be sworn as a common witness upon all points of evidence he may have obtained previous to his engagement as counsel, or after he has been dismissed, or in the relation of a friend. Justice demands that crime be punished, and crime communicated to a physician while asking his advice, is not furnished to aid his defense, but by way of avoiding some of the consequences of crime. Thus, a woman who has committed abortion, confides the fact to her physician only when forced to do so, that he may arrest, perhaps, the flow of blood that threatens her life. It is true that this is *voluntary* on her part, yet the consequences of her crime are what she desires to avoid, and to accomplish this she shadows herself under the wing of *professional secresy*. It is not to be wondered that Prof. Lee should say that "exposure would be worse than any punishment that could be inflicted." It adds greatly to the frequency of crime that its consequences can thus readily be avoided by the secresy of a professional attendant, who can avert all danger and retain within his own breast all knowledge of the crime. It renders, in fact, the punishment of these crimes out of question—for they can not be proved. Thus, the wounded thief, or murderer, seeks medical aid to avert the consequences of his crime, and the physician who guarantees secresy, aids the criminal in avoiding punishment. The honest farmer who feeds him, and hauls him to the physician, might, with as just claims, assert that *the* man's necessities forced him to reveal his condition, and that therefore *he* is privileged. *The truth is*, the criminal is responsible for being found in a condition that compels him to throw himself upon the mercy of his fellow-men, and the laws of disgraced and insulted society demand that he be held responsible. Numerous instances are on record where criminals seeking advice have been delivered up to justice.

As to death-bed confessions little need be said. These confessions to be of any legal value must be made after all possible hope of recovery is lost. The patient must be under the conviction of impending death. It is not necessary that he state that he is conscious of impending death, but it must be evident that, from the nature of his disease or injury he can entertain no hope of recovery. It is not necessary that death be immediately at hand to render this confession valid. These confessions do not necessarily involve a question of "privilege" with the attendant. Confessions, when of any value, must be *spontaneous*, they must be induced by no influence of any kind whatever. The principal



point to which I wish to call your attention is, that with these as with wills, etc., your evidence will be required chiefly with reference to the patient's *sanity*. The medical man must be certain that the patient's mind is not influenced by delirium or insanity. Numerous instances are recorded, in which dying patients have shocked their friends by a confession of murder, when afterward it was ascertained to be incorrect. A woman, in one instance, stated how she had killed her child—where she had placed the body—every one present knew it to be impossible, the child being alive and well in the next room. A few days ago a lady dying in Indiana stated that she had previously suffocated her child with the bed clothing; it was found to be incorrect, the child having died in the presence of witnesses, from an attack of croup. This will teach you to exercise great care, lest the dying person express some mental illusion to the disadvantage of some unsuspecting and innocent person.

And now, gentlemen, before leaving the subject in your hands let me refresh your minds upon some important points passed over. I can do this, in reference to evidence in no better way, than to quote from a report made by Dr. C. B. Coventry, to the American Medical Association, on the medical jurisprudence of insanity, in which he makes the following suggestions relative to evidence. He says of the expert: "If, however, he concludes to form an opinion and testify, there are certain rules and regulations which he should adopt, not only to give force to his testimony but for his protection:

"1. He should listen attentively to the testimony, as to all the facts in the case, and avail himself of every authentic means of forming a correct opinion.

"2. He should studiously guard against being biased either by popular clamor, or because he is called by one side rather than the other. He is to form his opinion exclusively from what appears in evidence, excluding as far as possible, any previous prejudices, or what he may have seen in the papers, or heard from rumor.

"3. The medical witness is not to take into consideration the influence which his testimony may have on the prisoner at the bar, or the case under consideration, if he is testifying as to facts he states the facts as he understands them. If it is a matter of opinion, drawn from the facts, he should state it honestly; but if he has his doubts he should express them.

"4. The expert is called to testify as to the bearing of the testimony given, and though he may have his own doubts as to the truth of the testimony, yet, if it stands unimpeached he must receive it as true. It is not proper for him to call in question the testimony of another witness, at the same time, he is not required to say he believes him, but can say that the testimony of the witness proves so and so, leaving the jury to judge of its credibility.

"5. A medical witness should not assume the province of the jury; as for instance, to say a particular wound was the cause of death; he should only state what would be the ordinary effect of such a wound; or in a question of insanity, that the testimony given was an evidence, or was not an evidence of insanity.

"6. The medical witness should have his mind fully prepared, before taking the stand as to what he can testify to, and his reasons if required. He should in his testimony avoid as much as possible, the use of technical terms, or professional, which the jury would not be likely to understand; but if unavoidable, then give their meaning to the jury. In giving his testimony he should keep cool and collected, and not permit himself to be irritated or confused by the counsel; and should avoid introducing any expression, or opinion not immediately connected with the case in court."

I would advise you, gentlemen, to exhibit at all times to both court and counsel the greatest respect. If you are before a coroner be on your guard relative to your views expressed, for whatever there you express you must reiterate in a higher court. If a post-mortem examination is necessary to enable you to give a correct opinion, it is your duty and privilege to demand it, before you form an opinion or testify, and it is also your privilege to refuse making it until you receive reasonable compensation. With reference to *witness fees* there is much diversity of opinion. Precedents have been established, at Indianapolis, of late, in the higher courts, to the effect that the knowledge held by the expert is his individual property, that which has cost him time, labor, and money, and which can not be required of him *except he be compensated as an expert*. Parties who refused to testify until paid a professional fee, have been sustained by the court. This would seem but right, as a lawyer would never in a single instance present his opinion, based upon legal science, for the mere pittance allowed the common witness. The time is not far distant when

this will be, probably, adjusted generally in accordance with the late precedent.

You have, gentlemen, by this time concluded, that the duties devolving upon you as a medical witness are not such that you should ardently desire to perform them ; but as sooner or later you will be called upon, if found qualified to fill them, I hope and trust that you will bear in mind their importance, and the fact that without a thorough acquaintance of all the authorities a witness is not fully qualified to give an opinion upon questions involving scientific knowledge. I frequently see men called into court to give evidence in cases of insanity, who never possessed nor ever read a single volume upon insanity during all their lives. They could not under any circumstances give you any classification of insanity, yet courts admit their evidence unquestioned. It is a question whether one-half who testify in county courts could give you a list of their different works upon jurisprudence, to say nothing of what these works contain. The masses judge the expert by his *presumed experience*. The counsel select witnesses rather for their *influence upon a jury*, than for the development of truth. Experience teaches, but *experience alone teaches little that is valuable*; for the mind of man is so constituted that passion and prejudice blind his judgment, and resting alone upon his own observations he is as liable to err as he is to conclude correctly. Smith, in his analysis of medical evidence, says, "It is very possible, therefore, that he who depends upon his experience may be inferior, as to his knowledge and experience, to the diligent student: for an accidental observer may be unqualified to make use of his opportunities, while the other may acquire much information, without going beyond the labors of others. The man of experience has to labor single handed, as much as all the others put together, ere he can equal them in pretension; while the student again may have opportunities of experience to a minor extent, but will make a vastly better use of a few than the uninformed can of many. *Presumed experience*, for that is certainly what the word in its ordinary use must be restricted to, is in a great measure accidental; it must fall to the share of different individuals in different forms and degrees. I believe that no small portion of that odious discrepancy which has prevailed among medical witnesses, whereby the luster of medicine itself has been so much tarnished, is chargeable to the prevalent affectation of being men of *experience* rather than men of *learning*, to the over



anxious wish of being extensively employed rather than solidly instructed and properly qualified." Prof. Charles Lee, to whom we have so often referred, presents in few words the true feature of this subject. He says (page 20, of Guy's Jurisprudence): "How often do we see medical men of scanty experience priding themselves upon their experience, and disparaging all knowledge derived from books, and by so doing demonstrate alike their ignorance and want of sense; for what is *individual* experience at the best when compared with all the vast stores accumulated by the sages of the profession of all ages. It is but a drop of water compared with the ocean, a moment of time with eternity. *Personal experience unless enlarged, improved, and corrected by that of others is of little value. Medical testimony, when of any value, is but little else than a reference to authority.*"

But, gentlemen, it will be natural for some of you to ask from whence comes the necessity for all this labor, as detailed by Profs. Smith and Lee? Empirics, with their "wise saws and modern instances," who like deadly canker gnaw at the vitals of professional reputation and honor, receive more homage than he who has toiled long in the professional vineyard. *Shall we agree that this is true?* The amount of *individual* exertion, of self-application each shall make, shall be the measure of his profit—shall be the measure of his greatness. "*There is no excellence without great labor.*" Bright intellects have toiled long for their reward, but sooner or later a just appreciation of their labor was received. The cold and heartless world around you, bound up in its own reflections, has no sympathy for you, you must find your reward in seeking the welfare of humanity and the good of all mankind. A well-spent life brings a rich return: a green old age. Habituate yourselves to constant, patient, energetic intellectual labor, and by singleness of purpose and untiring effort you will succeed. Do not lay down at ease because you are not appreciated, if there are those around you who do not appreciate your efforts, and many from personal jealousy and pique at your success do not wish to, there are those better constituted to judge of merit who will have a high regard for them. The man of Proverbs has somewhere said: "The heat of an excited intellect radiating to its fellow, doth kindle dry leaves afar off while the green wood around it is untouched." Let the intellect maintain its heat, and cold hearts and stubborn around you will warm and melt into a mass of generous sympathy. As all fluids gravitate to a level, so



will man reach his true situation, and though he may complain he will in due time be appreciated for all that he is worth.

[The next lecture will be divided: the first half of it will discuss, 1. What is the mind? 2. What is consciousness? Perception? 3. Does the mind always think? Does it ever sleep? 4. Is the action of the mind always voluntary? The next or second part discusses, 5. What is genius? Is it *protracted attention*? 6. What is memory? 7. What knowledge does the mind possess? The discussion of these is presented as a basis necessary for the illustration of idiocy, imbecility, and the various forms of acquired insanity—the questions also having great interest to every thinking mind.]

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### *The Physical Units of Organic Life.*

By Z. C. McELROY, M.D., Zanesville, O., President Muskingum County Medical Society.

THE most complicated problem ever offered to the human mind for its study and solution, is the human body itself. The dissimilarity between it and the physical world around it is most striking; though a sack of wheat-grains, or cup of milk, contains all the material elements necessary for its composition. But the body as a living, mobile, sentient and intelligent mass, how unlike the material elements which compose it!

By nature a religious being, the mind itself is never so contented and happy as in the worship of something esteemed superior to itself. Revealed religion points upward to a future celestial home for the spirit, dwelling in a tabernacle of clay, for a season, on earth. From hence it came, and to thence it will in due season return.

The early observers, having no science or philosophy to guide them, very properly confined themselves to recording its phenomena in health and disease. The great dissimilarity between the phenomena of its diseased (so to speak) conditions, gave rise to nosological classifications, which in time became very refined and minute. In their nature they were, and are still considered separate and special entities, a something foreign to the body, and in no wise connected with any of its natural processes. In like

manner the effect of remedial agents were noted; and in due season grew a minute division and classification of them, based on the most prominent single phenomena following the administration of each, as emesis, catharsis, etc.

In approaching the unknown center, or citadel, of organized life, naturally enough the first thing done was carefully to distinguish the non-essential from the essential, and in this way the elements of complexity have been greatly reduced in number. Its anatomy, except in some minute, and for practical purposes unimportant features, has been substantially complete for half a century. But nothing of the sort can truthfully be said of the remaining ministerial branches of practical medicine, viz.: physiology, pathology, therapeutics, and materia medica. Facts have been accumulated, as the result of observation of the living, as well as dead body; revelation of fortunate accident; and direct and indirect experiment, in health and disease; and upon inferior animals, when studied on them alone, to disclose its central ideas, or units. For it is undeniably true that complexity must be made up of simple units. Chemistry has made known its ultimate elements; and they are such as are widely distributed over the globe. They number twelve in all, but in very unequal proportions. Taking the known chemical peculiarities of the physical constituents, it will be seen that they are the only known elements out of which bodies, with the phenomena and properties of the human body, could be made.

To obtain the requisite flexibility and mobility, the gaseous elements preponderate in its ultimate constituents. To give FORM and stability for the evolution of its mechanical, as well as all other phenomena, lime and carbon are largely employed. These of themselves have little mobility or flexibility. Hence, in the bony structures they are combined with phosphorus, which is endowed with very high mobility. In the softer textures, hydrogen, having high mobility, exists in nearly equal proportions with carbon. Nitrogen, also possessing high mobile powers, in about half the quantity of carbon and hydrogen; while oxygen, sulphur, lime, potass, soda, phosphorus and magnesia, are but sparingly found; but contributing largely to stability, flexibility and mobility. Then, iron, easily taking up and releasing oxygen, is the indirect agent of mobility, conveying the free oxygen of the atmosphere, the direct means itself of evolving all mobility, flexibility and chemical changes, into the great chemical laboratory of the

body—its capillaries. Thus, it will be seen, that these are the only known elements, which, in their combinations, could give the requisite stability of form, and mobility in chemical changes necessary in the evolution of the phenomena of the human body, in all its mechanical, chemical, thermal, emotional, sensational and intellectual aspects. Some other metallic, and earthy oxides, may be accidentally present without detriment to the whole. In fact, empirical therapeutics demonstrate their value in modifying one of the physical units of force, viz. : motion, in various pathological states ; some acting by increasing motion in the interest of nutrition, as bismuth, copper, arsenic, etc. ; while others are as unequivocal agents in increasing motion in the interest of decay, as mercury, iodine, bromine, antimony, etc.

Out of the wheaten grain, the tissues of man and his domestic animals can certainly all be constructed. And either directly or indirectly, the tissues of all animal life ; for no known animal existence possesses the power to construct, from the elements directly, its tissues. The capacity to do this is limited to the vegetable world. And even here the vegetable only attains its highest perfection in the midst of decaying organic matter. The wheaten loaf may, then, be considered the formless physical basis of all animal life. A man, his family, and domestic animals, may eat from the same wheaten loaf, and it will make tissues for all. The difference between man, and any of his domestic animals must be looked for outside of the material of their tissues, or bodies. They all can eat from the same wheaten loaf, live under similar physical conditions, and have many properties, and evolve many phenomena in common. There is, without doubt, an identity of force in the constitution of their tissues, that is, they all require light, heat, etc., for the preservation, perpetuation, and multiplication of their individual existences. The difference between them not being in either the matter or force concerned in their individual organizations, there is but one other feature, common to them all, in which it is possible to locate it, and that is their forms. And form is the simple physical unit of matter, for all animal organic life.\* And as each animal reproduces its kind, in the main,

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\* “. . . In the true idea of the FORM of an object is involved not merely its structure, or that part of its nature with which the anatomist is concerned ; it also includes the whole of the qualities and dispositions which pertain to it, and which distinguish it *socially* from other things. And this in fact is its *essential nature*, being that which gives it a place and function in the general



directly, though sometimes indirectly, as in the moth and butterfly families, this fact indicates the existence of a firm force in all organic life. As the same wheaten loaf, or first matter of life, this may, under like conditions, be transformed into the forms of these diversified individual existences of animal life, in like manner, indicates the existence of an organizing or formless force, common, too, to all organic life. It is the present tendency of science to consider the form force as a correlation of the ordinary physical forces of light, heat, etc.; while it may be considered as settled with tolerable accuracy that the organizing, or formless force is a correlation of the same ordinary physical forces of light, heat, etc. In the act of reproduction, or perpetuation, the male supplies the form force, while the female supplies the organizing, or formless force, and for all mammals, the material.

For the evolution of any, or all of the phenomena peculiar to the human body, as indeed of all the organized existences, its elements must have certain definite forms; and motion must occur (chemical changes), in the molecular structure of these forms, which demonstrates that the simple physical unit of force is motion.\*

Form and motion, then, as claimed by physiology, and demonstrated by pathology and morbid anatomy, are the simple physical unities of the human body, and all organic life.

economy of creation. The END is always nobler than the MEANS, for the means are only the processes by which the end shall be attained. In all our groupings and classifications, therefore, we should view the organic structure as intermediate between the ARTIST and the END he has in view."

Grindon, *Life*, 495.

\* "Reviewing the various and wonderful processes, we can not fail to observe how, in its every phase and expression, the greatest sign and certificate of life is MOTION. Usefully, then, may we pause upon the consideration of it as a kind of summary and continent of vital phenomena. . . . We must not confound it with *moving about*. Motion, ordinarily so called, implying visible change of place and position, and furnishing us with the idea of time, does not comprise the ALL of motion. There is motion which no eye can perceive, motion which we are made aware of only by witnessing its results. Of this kind indeed is the chief part; the most wonderful and efficient movements in the world are those which proceed in secrecy and silence. . . . Apart from structure (form?) motion is a criterion of vital excellence, of course under the reservation, that the quality of life depends primarily and essentially on its End, else the sea would be more living than a plant; and a watch, or other piece of self-acting mechanism commend itself as of nobler nature than animals."—*Loc. Cit.* pp. 100, 101.



These physical unities of organic life are all the more interesting, because they define sharply our power as physicians and pathologists, with therapeutic agents. Thus, empirical therapeutics for twenty centuries past demonstrate, that even forms, neither therapeutic, remedial, or hygienic agencies exercise any control, or influence whatever, except to destroy; and this only in a very limited degree, as demonstrated by the necessity for operative surgery. This inability of therapeutic, remedial, or hygienic agencies, to control, or construct forms, could be predicted from other facts; for the giving form is the central ideal, or act of creation; for, if by any means forms could be created, man, himself, would be equal in power to his Creator. Practically, therefore, so far as therapeutics are concerned in organic life, the matter of form, or forms, one of its physical units must be left out of consideration altogether. The occasional wasting of normal or abnormal forms by remedial agencies, as by iodine, etc., is merged into the physical unit of force, to-wit, motion. The ultimate effects of all therapeutic, remedial, or hygienic agents, or measures whatever, are mergeable into the simple physical unit of force, motion. And that is absolutely all that we, as physicians and pathologists, can do for our fellow-beings, in states designated as sickness, to promote or retard motion in the molecular structure of their forms, viz.: organs, tissues, and textures; or the destruction of the whole, or some part of a form. The existence then, of a peculiar vital force, controlling the material organization of a living being, separate and distinct from the physical forces of light, heat, electricity, etc., of the inorganic world, fails to be demonstrated, for the simple physical units of form and motion cover, and account for all the facts of life in health and disease. As a fact, therefore, it has no existence in the matter and force concerned in organic life, in so far as it concerns us, as physicians and pathologists. Of the existence of spirit in a living being, as for instance in the writer and reader of this memoir, no doubt whatever is entertained. But as it can only be manifest to us, through the forms and motion of organized inorganic matter, and our control over forms amounts to just nothing, except their destruction, spirit, as an element of organic life, may be safely left out of consideration in pathology and therapeutics.

The facts of physiology, pathology, and physical science, it seems to me, demonstrate the following conclusions:

1. The strictly terrestrial nature of the material of all organic life on our globe.

2. That in all that concerns nutrition, or growth of the human body, as well as the oxidation, or decay of its tissues, simultaneously evolving the phenomena of organic life, the physical forces of light, heat, electricity, etc., are correlated as the organizing, or formless force.

3. That in all probability the types and forms of organic life are due to a correlation of the ordinary physical forces, though complete demonstration to this effect is still wanting.

4. That spirit, or life, is only manifested to us through the forms and motion in the molecular structure of the forms of organic life.

5. That all that we can, as physicians and pathologists influence by therapeutic, remedial, or hygienic agents, are the chemical changes occurring in the matter and force of the human body, common to inorganic nature.

6. That there exists no super, or extra terrestrial force, commonly called vital, controlling the physical organization of the human body.

7. That the effects of all known therapeutic, remedial and hygienic agents, or measures, can be merged into motion—that is, promoting or retarding motion in the molecular structure of the tissues and textures of the body.

A very rare, and highly interesting case, extremely well reported, appeared in *THE LANCET AND OBSERVER* for Dec., 1869, which confirms most of these propositions in itself, though all the records in existence of morbid anatomy are evidence of the same effect. Thus, the existence of the separate modes of force here designated as formless, or organizing, and form force, are abundantly demonstrated. And it seems very clear to me, that, in connection with the known and received facts of morbid anatomy, all the phenomena of Mr. Lawler's most interesting case, show that one of the physical units of pathology is lost forms; and that the difference between all lost forms, from cancer (so-called), to the calx tissues disclosed at the *sectio cadaveris* of Mr. Lawler, are merged into the simple physical unit of motion. Had Mr. Lawler's forms, as their normal type was lost, been replaced by the active cancer, instead of the passive calx, his life would have terminated several decades of years sooner than it did.

***Acute Hepatitis---Abscess with Rupture of Lung---Pneumothorax---Empyema.***

By G. R. PATTON, M. D., Cincinnati.

*History.*—John Hunter, age, 17 years; occupation, tinner; a robust lad of good habits; lived with his parents, who are healthy; had no illness since a child, until that now related; continued his work till 7 p. m. of the night he was taken sick, Dec. 17, 1869. He complained daily for more than one week previous of a dull, aching pain and heaviness in his right side. Rested badly also at night.

*Symptoms.*—Dec. 18, when first visited, he had severe obtuse tensile pain in the right hypochondrium and epigastrium, increased by pressure and deep inspirations. Enlargement of these regions perceptible to the eye. Dullness extended seven inches vertically on the right side. The lower border of the liver in front could be traced by the fingers three inches below the ribs, which bulged greatly. Flatness also by percussion over epigastrium and left hypochondrium. Respiration 20, and not embarrassed; no cough; pulse 104, soft and weak; headache; decubitus dorsal; can not lie upon his left side without decided discomfort; tongue moist, covered with thin, whitish fur; thirsty; no gastric irritation; bowels free; discharges thin and dark brown; absence of pain or tenderness over lower regions of abdomen; urine of normal color; no icterus; free from pain in right shoulder.

*Diagnosis.*—*Hepatitis.*—The entire organ in a state of active hyperæmia. Gave an anodyne of *camphor-water and morphia*. Anodyne fomentations over the region of pain.

*Progress of the case.*—Dec. 23; no cough, expectoration, dyspnoea, pain or other pulmonary symptoms; pulse 112, without force; one evacuation in 24 hours.; urine of proper quantity and color; increased tension of right hypochondrium; pain constant, at times acute. Ordered small portions of *rheubarb hyoscyamus and quinia* in place of the anodyne. Nutrients given.

Dec. 28. Respiration 24, not painful unless deep; hacking cough; expectoration scanty, white and tenacious; pain severe, increased by the cough; often it is sharp and lancinating; pulse 116, soft and feeble; tongue thickly furred, though not dry; discharges green liquid, 6 in 24 hours.; vomited to-day a greenish, frothy fluid, the first gastric irritation manifested; lies now upon his right side

exclusively; distension of right side and the epigastrium increasing; skin hot and dry; urine diminished, dark red. Resumed the anodyne first given. Stimulants added.

Dec. 31. He has not vomited since last report; tongue becoming dry; fur a yellowish brown; sclerotic not discolored; neither rigor nor other indication of the formation of abscess; dejections green liquid and frequent; pain higher up. Fomentations discontinued, as they annoy him. The anodyne sparingly given.

Jan. 3, 1870. Alæ dilate somewhat in respiration, now 30 per minute; hectic flushing of the face; cough frequent and painful; spitting of tenacious mucus increased; bulging of side still greater; pain lancinating and very severe; pulse 128, soft and very weak; tongue quite dry and brown; thirst intense; bowels free; decubitus, since the first, in the prone position.

Jan. 4. A very marked change since last report. Instead of the prone position he is now sitting upright in bed, and seems to be suffocating. Right chest so greatly dilated that the intercostal spaces are obliterated and bulging. Body inclined to the left side. Heart's impulse about two inches to the left.

(Not being able myself to appreciate properly the auscultatory signs from some difficulty of hearing, I was very happy in meeting my friend, Prof. Graham, in consultation, to whom I am indebted for the following note:)

*Cincinnati, January 1870.*

DR. PATTON—

*Dear Sir:* In my consultation with you in the case of young Hunter, I agreed with you as to the existence of inflammation of the liver, and from the acute sensibility expressed the opinion that the investing membrane of the organ must be greatly involved.

While exploring the region of the liver, I was struck with the appearance of general fullness, obliteration of the intercostal depressions, and want of mobility of the right chest, in the act of respiration, as well also with the displacement of the heart, its apex beat being far off to the left.

Percussion yielded an unusual degree of resonance over the whole of the anterior of the right chest, extending lower than the usual line of the diaphragm, and further to the left than the mediastinum. Posteriorly and below there was diminished resonance, but no marked dullness.

(On account of the suffering of the patient from pain and diffi-



culty of breathing, I changed his position as little as possible, and could not, therefore, form an opinion as to the whole amount of fluid he had in his chest. My impression at the time was that the amount was not large.)

Auscultation revealed that there was no vesicular murmur to be heard lower than the upper third of the lung in front, and this was rude from being mixed with bronchial sounds. Posteriorly the latter were louder and were heard lower down. Vocal fremitus and resonance were nearly lost. But the most important discovery was that of distinct amphoric respiration.

Upon the rational and physical signs present, and especially as the patient had at no time expectorated such a quantity as to raise even a presumption of a cavity in the lung, I gave it as my opinion that he had pneumothorax, from rupture of lung, making communication between the bronchial tubes and pleural cavity.

Yours truly,

JAMES GRAHAM.

Subsequent to our consultation, as well as prior to it, palliative measures were adopted. He gradually sunk, and died on the 9th, five days after the rupture of the pulmonary abscess.

*Sectio-cadaveris* 26 hours after death.—Dr. Graham present. Body considerably emaciated; surface not jaundiced; rigor mortis well marked. On opening the body the turgid liver bulged up above the level of the incised integuments. The diaphragm on the right side was pushed down tensely about 4 inches, and correspondingly depressed the liver. By minutely puncturing the diaphragm anteriorly, a large volume of air, devoid of fetor, escaped with force, partly collapsing the pleural cavity.

*Thorax*.—Found about 3 quarts of laudable looking pus in the right pleural sack. Its removal revealed the border of the lower lobe adherent posteriorly to the diaphragm, and the lung compressed against the spinal column into a spindle-shaped mass about 6 inches long and  $1\frac{1}{2}$  inches in diameter at the thickest part. Pleural surface coated with membraniform lymph, very soft, easily removed and without organization. The membrane presented no redness, but had lost its transparency.

An abscess of the size and shape of an almond, having a smooth, well-defined wall, was discovered near the posterior border of the concave surface of the inferior lobe, or at the site of adhesion to the diaphragm, the latter forming seemingly a part of its boun-

dary. Between this abscess and the pleural cavity there was a minute communication. The *carnified* lung presented no other appearance of disease. The left lung was compressed into one-half its normal bulk, but not diseased. *Heart* was healthy, and contained loose, friable, dark coagula. It was displaced nearly two inches to the left.

ABDOMEN.—Serous fluid in excess of the natural quantity. *Intestines* showed no appearances worthy of note. *Stomach* displaced downward and to the left. *Liver* estimated to be more than twice the healthy size. The anterior margin of the right lobe reached within three inches of the symphysis, and was very thick and rounded; the left lobe quite filled the left hypochondrium. The peritoneal investment in front, or the front surface of the anterior border, was smooth, glistening, and somewhat mottled over almost its entire extent; at a number of points, however, rough, thickened and adherent to the parietal reflection of the peritoneum. Posteriorly its covering was mottled dark blue and black, unevenly thickened over two-thirds of its extent, and adherent by a number of bands to the small intestines. The posterior half of the convex surface of the right lobe was densely and inseparably adherent to the corresponding surface of the diaphragm. The left lobe not attached to diaphragm, but pressing it upward with some force. That portion of the diaphragm to which the lung and liver were adherent, was thickened by inflammatory deposit apparently tending to suppurative change. Gall-bladder contracted and nearly empty.

The organ was hard and resisting in front, much less so to pressure upon the posterior or inferior surface. By incision to the depth of several inches on the anterior surface, the parenchyma had a reddish-gray granular appearance, without much moisture of the cut surfaces. By cutting into the left lobe from behind or below, it presented a nearly uniform brown, while the right showed a dark red surface with a reddish exudation.

In the posterior portion of the convex surface there was found a whitish-yellow pultaceous mass of irregular and uneven outline, about two-thirds of the size of a hen's egg. Its consistence and resistance to pressure was considerably less than that of brain structure. A part of the circumference of this mass was in contact with the thickened hepatic peritoneum, being that portion of it which was united to the diaphragm. The other organs were normal.

To sum up, then, the pathological appearances within the compass of a nut-shell, we found the inflamed edge of the lung with a ruptured abscess, and the adjacent convex surface of the liver with a nearly ripened one, united together through the intervening, inflamed, thickened, but still imperforate diaphragm.

REMARKS.—This case is one of unusual interest, and in some respects remarkable. It exhibits in a marked manner the conservative power of the human organism in preparing an avenue of escape for morbid products yet in process of generation in parts remote from the surface, and also the failure of the effort of nature through a rare complication.

The cause or origin of the hepatic disease is beyond our cognizance. The subject of it was comfortably housed and clad, well but plainly fed, had light employment, was exemplary in his habits, and never previously had any recognizable functional disorder of the liver itself. It may, therefore, I think, as most other local inflammations, be considered spontaneous.

A more important inquiry, however, is that concerning the pulmonary abscess. Can its formation be accounted for by *thrombosis* or *embolism*? Undoubtedly it can not. Was the inflammation of the parenchyma of the liver and that of the lung produced by the same cause at the same time, or was the diseased action in either organ a coincidence only, and independent of a common origin?

While it is possible that auscultation during the early period of this unique case might have shed some light upon this point; still, it is my opinion that the symptoms, the progress of the case and the post-mortem furnish sufficient evidence to prove that the initiatory departure was in the texture of the liver, and that the adhesive inflammatory action was propagated thence *seriatim* to the hepatic peritoneum, to the peritoneal layers reflected underneath the diaphragm to the muscular septum itself, to the diaphragmatic reflection of the pleura costalis, the pleura pulmonalis, and finally to the lung parenchyma; and, moreover, that this sequence of progression took place in pursuance of that preservative process which is not only attempted, but usually consummated, when inflammation develops peccant matter in the convex surface of the liver, but which, unfortunately, in the present instance seems to have anticipated or exceeded even the requirements of the case.

It is probable that the conservative inflammation spread upward at first with unwonted rapidity, and that a suppurative result was



determined thus early in the pulmonary parenchyma—and in advance of this process in the diaphragm and its investments—through some unknown irritation in the lung itself, conjoined with its well-known vascularity, for the events of inflammation are rapid of development in any part just in proportion to the liberality of the supply of blood to it.

An abscess, then, having been thus prematurely formed in the surface of the lung, there is every reason to believe that a rupture of its pleural wall happened, from the upward pressure of the enormous liver, coincident with, probably, an act of severe coughing, permitting its contents, along with the inspired air, to enter into the pleural cavity, and exciting therein suppurative pleuritis or empyema.

If this accident had not taken place, there is a very strong presumption—founded upon the previous vigor and healthfulness of the deceased and the favorable termination of many such cases—that the maturing hepatic abscess would eventually have perforated the diaphragm by suppurative extension, and that its contents would have been discharged through the air passages, or through the thoracic walls, without a fatal result.

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ANTAGONISM OF MORPHIA AND ATROPIA.—A good example of the antagonism of these drugs is referred to in the *Medical Times and Gazette* for Nov. 20, as occurring in the practice of M. Béhier. In this case an old man took a solution of sulphate atropia, prepared for ophthalmoscopic purposes, containing one-fifth of a grain. He experienced an acid taste in the throat, slight embarrassment in the movements of the tongue, muscular weakness, a difficulty in walking, soon amounting to impossibility, and disturbance of vision. M. Béhier, knowing the antagonism of morphia and atropia (described by Gräfe in 1862), prescribed ten drops of laudanum every ten minutes. Each dose diminished the intensity of the symptoms. The patient took, on the whole, seventy-six drops—a dose which, if he had not previously taken the atropia, would have undoubtedly produced symptoms of poisoning by opium.



## Translations.

*Transactions of the Obstetrical and Gynaecological Section of the 43d Congress of the German Physicians and Physicists, at Innsbruck, Sept. 18-24, 1869.*

(*Schmidts Jahrbucher*, Nov. 30, 1869.)

By JAS. T. WHITTAKER, Cincinnati, Ohio.

Four sessions under the Chairmanships of Prof. Lange, Heidelberg; Prof. Spiegelberg, Breslau; Dir. Birnbaum, Cologne; Prof. Späth, Vienna; respectively:

*Essays*—Prof. *Lange*, on a case of "Cæsarian Section, from a Pelvis with the Transverse Contraction," to be fully published in the *Monabschrift f. Geburtskunde*.

Prof. *Spiegelberg*, on the "Value of the Induction of Premature Labor;" according to his own experience (305 cases in the clinic and polyclinic of Breslau), and according to that of others, the induction of premature labors does not afford the results which are usually expected, since it is not to be practiced in pelves of 3 in. conjugate and over, and is only admissible in greater contraction when previous labors have been characterized by large resisting heads or unfavorable presentations, or when great injury might ensue to soft parts already in disease. The habitual occurrence of death in the two last months of pregnancy, presents no indication since this accident is caused by hereditary syphilis, which the interruption of pregnancy does not destroy. The premature induction is only justifiable in disease of the mother, caused or aggravated by pregnancy, and only then when there is hope of rescue to the mother's life. As regards the termination of the birth with or without induction, in answer to Prof. Dohrn, Sp. remarked that he had had unfortunate results in three cases in the same patient. The reason that more favorable results occurred in private practice than in clinics, seemed to depend upon the more frequent examinations by the students in the latter case. Dr. *Birnbaum* had observed habitual death of the fœtus in chronic induration of the cervical mucous membrane, and had applied injection

of cup. sulph. in the interval of two pregnancies, with success. Prof. *Hegar*, Freiburg, agreeing with Prof. Sp., in regard to premature delivery, had also noticed habitual death without syphilis, and had observed after catheterism and injections into the uterus, inflammatory affections even with fatal termination.

Prof. *Breisby*, Bern, "On the condition of the Cervix during Labor." Physiological softening arises with lengthening and paralysis, caused by the pains and by pressure of the membranes as well as by the presenting parts. He had found, by measurement with the finger, a lengthening of even 6 ctmtr., and called attention to the importance of the cervical condition in originating flexions in the puerperal bed. Rupture of the cervix is often caused by physical peculiarities of its tissue.

Prof. *Freund*, on "Parametritis chronica atrophicans," an affection in its anatomical substrata but little known, from its symptoms called hysteria. (To be published in full.)

Prof. *Dohrn*, Marbury, on the "Tubes of Müller and the Development of the Uterus." From the various examinations of human and animal embryos, the following conclusions are drawn: *a*, The coalition of the tubes of Müller begins between the middle and lower third of the genital cord, advances then upward and downward, but downward faster; this accounts for the fact that separation often exists in the upper portion of the female genital cord. *b*, The left tube lies higher, generally, than the right, and the coalition occurs in this oblique position. The pressure of the intestinal extremity on the left is the cause of this elevation, which thus explains the frequent version of the uterus on its axis, so that its left border is turned forward. *c*, In man the coalition occurs early, being finished in its entire course by the end of the second month of embryo life.

Prof. *Spiegelberg*, on the "Diagnostic Significance of the Puncture of Ovarian Tumors." Of more importance in the differentiation of cysts of the ovary from those of other organs, of less for a distinction between the different kinds of ovarian cysts themselves. Of particular value is the exploratory puncture for the differential diagnosis of ovarian cysts from ascites; besides the greater quantity of albumen and the multitudinous forms of epithelial structure he denotes as characteristic for ovarian cysts the absence of the fibrogenous substance present in peritoneal exudation with the clot (*gerinnsel*) formations dependent thereon; as well as of the movable amœboid cells. He regards the tenta-

tive puncture as irremissible before every attempt at radical cure, although it is not always so innocent as is generally believed, and in this he is corroborated by Prof. *Hegar*, who had seen the discharge continue and a blood effusion occur in the emptied space with fatal termination, and this from a puncture of the cyst through the vagina, with a very fine trocar.

Prof. *Kehrer*, Giessen, demonstrated the "Mechanism of several Pelvic Deformities," on two caoutchouc pelves decalcinated with nitric acid. The form of the flat rachitic pelvis is caused by the weight of the body and the counter-pressure of the femora, upward traction of the spinal extensors on the extremity of the sacrum (with diminished action of the abdominal muscles), and traction of the rotators on the coccyx. The osteo-malacic pelvis originates besides from pressure and counter-pressure of the body and femora, from relaxation of the spinal extensors and the quadratic lumborum with secondary increase of their antagonists, the muscles of the abdomen, the median fasciculus, and the iliaci. The oblique oval pelvis is due to the fact that the weight of the body is supported in the direction of the distantia sacro-condyloidea, the cyphotie oblique contraction by upward and downward pressure in the direction of the base of the sacrum. According to Dr. *Freund*, Breslau, the sacrum is thinner in the rachitic pelvis, and longer anteriorly than posteriorly, because the burden of the body is not transmitted through the bodies of the vertebræ, but through their oblique processes. *Kehrer* explains the convex form of the anterior sacral surface in the rachitic pelvis by the diminished firmness of union of the intervertebral discs permitting a version of the sacrum and a change of form so that its angle is directed backward. The great flattening of the anterior wall of the pelvis in rachitis as compared to the beak form of osteo-malacia, finds an explanation in the fact that the softening process in the former affects to a greater degree the extremities of the bones, while in the latter the process is more universal. Prof. *Hegar* considers the traction of the muscles as less effective because it implies a greater (not demonstrable) activity of their contractile power. *Kehrer* explains the symmetrical traction of the spinal muscles by the coincident relaxation of the abdominal muscles in the rachitic child. *Birnbaum* saw a case of the oblique contraction caused by tight lacing.

Dr. *Schatz*, Leipzig, on the "Mechanism of Comparative Labor." (To be published in full.)



*M. R. Küchenmeister* presented several gynæcological instruments. (a.) A pair of scissors with a projection at right angles on one of the blades to gauge the extent of the section of the portio vaginalis and to avoid making it shorter than designed. Prof. Spiegelberg found the action of the scissors certain, but they caused often a severe hemorrhage by tearing the tissue, a hemorrhage which might render the application of cauterization necessary, and this leads to parametritis. K. believed that tearing might be avoided by a careful section. (b.) A curved trocar for the puncture of hematocle which might also arise from an escape of blood from the accessory tubes often (?)\* found or from the orifices of the fallopian tubes during menstruation.

*Prof. Kehrér* maintained that an effusion of blood could only originate from the Graafian follicle or *pathologically* from the mucous membrane of the tube; an escape from the uterus through the tubes is very improbable, on account of the slow discharge of the fluid. Prof. Freund inserts a short trocar thicker at its upper extremity and lengthened by a catheter, and leaves it there. (c.) A forceps for the removal of polypi out of reach of the finger.

Prof. *Spiegelberg* on "Galvano-caustic Operations on the Uterus." Amputation of the collum uteri with the knife especially for carcinoma is followed by very severe hemorrhage, with the ecraseur hemorrhage is generally, though not by any means always, prevented, but the neighboring parts suffer from pressure. The disadvantages mentioned are avoided by the galvano-caustic noose. The wire must be applied as nearly as possible to the vaginal insertion,† and to effect this a spatula-shaped instrument will prove of service. The noose is to slowly attain a white heat, and to be allowed to slowly cut its way through, whereby it leaves a smooth surface of good granulation. The operation induces no

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\*According to the observations of Richard, besides the regular orifice there occur in certain cases other lateral openings also provided with fimbriæ. He found them five times in thirty cases, and either in the neighborhood of the proper orifices or in the middle of the tube. In one case the lateral opening conducted into a short membranous tube communicating with the fallopian. I have lately discovered such a lateral orifice in immediate proximity to the proper *ostium abdominalæ tubæ*.—*Hyrſl Anatomie des Menschen*.—[*Trans.*]

†Another decided advantage of the galvano-caustic noose is the comparative impunity with which a portion of the peritoneum may be removed where the disease is so extensive as to involve the supra-vaginal cervix. We can recall a case in Prof. Braun's clinic at Vienna, where in a full square inch was abstracted and the patient recovered.—[*Trans.*]



hemorrhage of mention, and is not painful, indeed the heat will not be even perceived if cold water be played upon the field of operation. In carcinoma the operation is only palliative as return has always been observed.

Regarding intra-uterine galvano-caustic treatment, Sp. remarked that he was opposed to intra-uterine treatment in general. In any case, dilation must first be effected. This is best done with the sponge tent. He had seen metritis and parametritis follow the injection of alkalis and iodine, more seldom, however, the use of argent. nit. and other astringents of more superficial action. In blenorragia and hemorrhages from endometritis polyposa he had cauterized the uterine cavity with a porcelain burner curved like the uterine sound, but he had always interrupted the current as soon as the patient complained of pain. In no case had he observed any great reaction. For the first few days after the operation no discharge existed; later, profuse and mixed with blood; this, however, ceased entirely within fourteen days. Prof. *Lange* and *Hegar* confirmed Sp.'s experience regarding the ecra-seur in cervical amputation. *Hegar* prefers the knife and scissors, as easier manipulated and as accelerating cure, and advises that the incision be made oblique and funnel-shaped (trichterförmig). To quell the hemorrhage he employs the suture of Sims, uniting the mucous membrane to the vagina at its insertion; further compression is not necessary. *Spiegelberg* considers the funnel incision with the suture as adaptable in simple elongations, but not in severe carcinomatous degeneration where recurrence is to be feared. *Hegar* responds that he first removes the main mass and then carries the incision into the cervix; the suture certainly does not effect union in carcinoma by prima intentio, but it is a good hemostatic, and renders compression and tampon superfluous. Prof *Späth* confirms in general the disadvantages of the intra-uterine treatment of flexions; he agrees with Sims that the uterus bears the bloody better than other procedures; the unfortunate results with the laminaria remaining unpublished. Dr. *Zini*, Graz, had seen two cases of unfavorable termination with the laminaria, and Dr. *Hugenberger*, Petersburg, had observed a pyæmic condition result in one case after its use. In flexions, he employs the sound of Simpson, which is well borne, when of proper length and properly applied.

## Medical Societies.

## CINCINNATI ACADEMY OF MEDICINE.

W. W. DAWSON, M. D., PRES'T.

J. C. MCKENZIE, M. D., SEC'Y.

*Abstract of the Report of the Section on Fevers.*

Made to the Academy of Medicine by J. F. WHITE, Chairman.

This report is limited to the consideration of the treatment of fevers, and consists to some extent, of an array of the experiences of distinguished clinicians against the teachings of Dr. Todd and others, commendatory of the early and indiscriminate use of alcohol in the management of such cases.

*Dr. Wilks*, of Guys Hospital, says: At the present time there are advocates for an universal method in favor of alcohol in all cases of fever, just as there are those who indiscriminately administer ammonia in scarlet fever, and who, when failing to prove its value in all cases, fall back upon the explanation that if alcohol or ammonia be of real service in a bad case of fever or scarlatina, and if these remedies do no harm in a milder form, it is a good rule to administer them universally. Such a method is not only unscientific, but positively injurious; for in many cases of typhus fever in young people, where the brain has been involved, I have a very strong opinion that the brandy which I have seen administered in such cases has been positively hurtful. The few instances I have seen, and fatally, have been those in which a large amount of stimulus was given from the commencement of the disease; and what, perhaps, is even more to the point, the withdrawal, in some cases, where it was adopted as the method of treatment, has been attended with the most decided advantage.

*Dr. Gairdner*, Glasgow Royal Infirmary, condemns the use of alcohol except under particular circumstances. He says:

That in cases of fever, under my care, the treatment, whether by stimulants, or medicines, or both, is directed entirely to emergencies and casualties, and not to the subduing of the febrile excitement, or the restraining of the typhoid delirium, or the

reduction of the frequency, or increasing the strength of the pulse. When there is an obvious tendency to collapse, wine or whisky may be used. He puts it forward as a law, or generalization, with respect to typhus fever: That in a large proportion of cases this fever left to its natural course, and treated with abundant milk diet and without drugs or stimulants, will present indications before the twelfth day of a favorable termination. Dr. Chambers confines the use of alcohol to cases of complete prostration and delirium of a low, muttering character. "A tremulous state of the muscles, marked especially by a quivering of the hands and fingers, is a good test for the necessity for it, and so is a sharp, weak, unequal beat of the heart. All these indicate that the nervous system is feeling very sensitively the destructive metamorphosis going on, and has its power lowered by its sensitiveness. Then is the opportunity for the powerful anæsthetic alcohol which, in severe cases, I order without scruple, but which I do not rank as a part of the *methodus medendi* of fever."

Dr. George Johnson, King's College Hospital, places his chief reliance in the treatment of typhoid fever, upon rest in bed, with good nursing, judicious feeding, and *stimulants when necessary*.

The report also furnishes striking evidence of the efficacy of hygienic measures, independent of drugs, in the treatment of fevers. Mention is also made of the special treatment of fevers, by acids, permanganate of potash, chlorate of quinine, the sulphites and chlorine water. According to the statistics, the mortality is very much diminished by the use of dilute hydrochloric acids, in addition to hygienic measures, including frequent administration of liquid food, with daily sponging the surface of the body with tepid water, according to the development of heat.

Attention is directed to an article in the *Medical Times and Gazette*, February, 1868, by J. Burney Yeo, who claims to have met with unprecedented success in the treatment of typhoid fever, by a method mostly original with himself, consisting—"if the case is seen at its outset, and before diarrhœa has set in, or when the diarrhœa is slight and there is not much abdominal pain—of a mild saline purge—only one—for the purpose of "sweeping away" the vitiated secretions and any other offending matters that may be lodged in the intestinal canal." This he considers especially desirable because, in the subsequent treatment, he proposes to endeavor to lock up the bowels completely for a time. The intestinal canal having been swept out, the "characteristic part of this



treatment commences." A solution of chlorine made by the action of hydrochloric acid on chlorate of potash, finely powdered, and water introduced "*secundum artem*" is administered to the patient in doses of half an ounce to an ounce, every half hour or oftener. The action of the remedy is explained by regarding the whole of the intestinal canal, during an attack of typhoid fever, as a long sewer, into which the morbid offending material present in the circulating fluids is constantly being poured. For reasons which I will directly explain, we must not attempt to get rid of this sewerage matter by *driving it out of the body*; we must even go so far as to check or arrest the natural efforts made for its expulsion. There is but one thing left for us to do. If we shut up these morbid products in the intestines, we must strive to render them innocuous. In short, we must disinfect our sewer! By the constant administration of a strong solution of chlorine by the mouth, this purpose is effected; much of the solution, no doubt, gets absorbed by the vessels of the stomach, and enters the blood directly; but much, also, must get intimately mixed with the food, and the food becomes so thoroughly impregnated with it that sufficient of the solution is carried along the alimentary canal to serve the purpose we have in view. If, says our author, I had cases of this fever under my care at present, I should carry this principle still further, and I would inject into the intestines solution of chlorine, or weak solutions of carbolic acid in water.

He then speaks of the tonic and refrigerant action of the excess of hydrochloric acid in the mixture, and its value of keeping up the power of the system, as well as its effect, noted by former observers, upon the tongue, rapidly cleansing it long before the other general symptoms of fever give way, as though it exerted primarily a cleansing action on the whole alimentary mucous membrane. After making some remarks on the symptoms and pathology of typhoid fever, he continues: "This inflammation and this diarrhoea are doubtless evidences of an attempt on the part of the system to throw off from the blood a morbid material present in it. On this account we are advised by some physicians to try and assist nature in her eliminative efforts. *I believe it to be our duty to do precisely the opposite!* viz: to strive to moderate and lessen this eliminative action—to keep it under control. It is this very process, as much as, or even more than, the presence of the poison in the blood, which produces the fatal result. By all means arrest peristaltic action in the bowels. *Keep them*



*perfectly at rest!* To this end he advises hot flannels soaked in warm turpentine to be applied, as counter irritants, to the abdominal surface, and the administration of the following enemata: Take Dover's powders, 2 to 10 grains, according to the age of the patient; tannin, 5 to 30 grains, mixed with one or two ounces of mucilage. This is thrown into the bowels after each loose discharge, diminishing the quantity of Dover's powder if the injections have been given more frequently than three times a day."

He endeavors to explain the advantages in this particular form enema, and concludes with some remarks on the use of stimulants, the sponging the patient with vinegar and water, removing him from one bed to another, so that he changes the fever atmosphere surrounding his body twice at least in the twenty-four hours.

Dr. J. H. Salter, of King's College, the author of a paper published in the March number of the same journal, on typhoid fever, with special reference to an "outbreak" at Terling, in Essex, writes as follows: "The high rate of deaths, in spite of the unusual professional care bestowed on the patients, places the 'outbreak' at Terling far in advance of the ordinary mortality of this disease. The cases were treated on 'general principles;' until latterly a great majority of them were treated in the manner advocated by Dr. I. Burney Yeo; and in justice to him I ought to mention that though a vast number of these cases were *extremely severe*, several exhibiting the most malignant symptoms of the epidemic, the treatment was steadily persevered with, and in all cases with a successful issue!"

Whatever faith we may have in the value of the sulphites in the treatment of zymotic diseases is not increased by the results of the recent investigations of Dr. J. W. Miller (*Edin. Med. Jour.*, Sept., 1869):

"During the year from June, 1865, to June, 1866, there were admitted into the hospital 884 cases of typhus. Of these, 161 were treated with the sulphites; sulphite of soda in most of the cases, and latterly sulphite of magnesia. The quantity administered varied from 60 to 240 grains a day, the most usual quantity for adults being from 120 to 180 grains a day. The mortality in those treated with sulphites was 1 in 10; without, 1 in 10.3. In the sixteen fatal cases, the use of the remedy was, in eight of them, begun on or before the third day; in two on the fourth day, and in four on the sixth day. In addition to these hospital cases, I have tried the sulphites in several cases in private practice, with

the same absence of effect. Two of these ended fatally, in one of which the sulphite of magnesia was given in thirty-grain doses every four hours, so early as the third day; in the other it was not commenced till the sixth day."

In a considerable number of cases, especially among the females, the sulphite induced diarrhea. Sometimes, also, but not so frequently, the sulphite provoked vomiting! In conclusion, the Doctor says: "I think that the facts elicited are abundantly sufficient to prove the uselessness of annoying such patients with the disagreeable draught for the taste is sufficiently nauseous!"

A word with regard to hydrate of chloral: "It reduces animal temperature. Why may it not be used with advantage in fevers, where there is a rapid increase of heat, with restlessness and excitement?"

#### DISCUSSION.

*Dr. Thornton* said that he approved of the opinions quoted in the report, especially those having reference to hygienic measures and the treatment of symptoms. There was no remedy for fever. Twenty-five years ago mercurials were given, but happily, that treatment was now abandoned. He thought that calomel had no beneficial effect in fevers. The treatment should be sustaining, with careful attention to hygienic measures and complications as they were.

*Dr. Walker* asked if mercurials could not control symptoms which might give rise to fevers.

*Dr. Thornton* replied that, in his judgment, there were two uses to which mercury might be applied—in the treatment of syphilis and as a cathartic. He did not think that it increased the secretion of bile or any other secretion. It might, however, cause the flow of bile already secreted. If he should use it at all in fever, it would be merely as a cathartic.

*Dr. Whittaker* said that in Germany physicians did not stimulate so early in the disease, nor to the same extent as physicians here. They generally gave beef soup as nutriment, not very frequently repeated. He thought that the mortality was as great, if not greater, there.

*Dr. Schmidt* said that typhoid fever was not of so grave a type here as in Germany. During the war, however, in the military hospitals in this city, the disease was very fatal, the mortality being 30 per cent., whereas, at the same time, in private practice, it did not exceed 2 or 3 per cent.

*Dr. Conner* said that the mortality in the military hospitals with which he had been connected had not been so great as that reported by *Dr. Schmidt*, although the type was frequently severe. In his experience, the less medicine given the greater the success of treatment. In Washington, pneumonia had been a very frequent complication. In New York, he had seen cases of a mixed character, the disease partaking of the nature of typhus and typhoid.

*Dr. Walker* stated that in the earlier period of his practice, he had rarely seen rose spots in typhoid fever. He had always noticed that when they were present there was pain in the right iliac region. In regard to mercury, he thought that it might control other kinds of inflammation besides syphilitic. When the patient has headache and lassitude, and the stools are pale, mercurials will prove beneficial, and in serous inflammations they are to be relied on.

*Dr. Ludlow* thought that the causes of the fever should, if possible, be discovered and removed. His mode of treating fevers was hygienic and dietetic. He regarded mercury not as a specific, but as useful in complications, as pneumonia, etc.

*Dr. W. B. Davis* said that, in 1864, there was an extensive epidemic of typhoid fever in this city. He employed the supporting treatment and did not lose a case. In regard to the great mortality in military hospitals in this city, *Dr. Schmidt* was correct. It was to be accounted for by the fact that the worst cases were sent here from the front, and many of the patients were in a moribund condition when admitted.

*Dr. Conner* thought that it might be due to crowding. He was certain that in the hospitals of the Army of the Potomac no such mortality existed as was reported by *Dr. Schmidt*.

#### DISCUSSION ON DR. WALTON'S PAPER ON CHLORAL.

*Dr. White* reported that his experience in regard to the new remedy accorded with that of others. The first patient for whom he had prescribed it was a gentleman who suffered with facial neuralgia at night. He took gr. xx, and in twenty minutes fell asleep; no bad effects. The second case was a lady with prurigo; she had tried the water-cure without any decided benefit; gr. xx of the hydrate of chloral was given to her; this was followed by nervousness; a second dose of the same quantity was administered and produced relief, which seemed to be permanent.



*Dr. Patton* reported the case of a woman who had suffered for a long time with attacks of severe neuralgia in the head, and had a crown of white hair corresponding to the seat of pain, and probably the result of the pain. She had an attack on the 9th of the month. On the 10th the doctor was called to see her. At that time, in addition to the pain, she had slight delirium;  $\text{ʒss}$  of chloral was administered per rectum, after which the patient slept one hour. When she awoke another enema, of a like quantity was given, and she slept six hours; awoke for a few minutes, fell asleep again, and slept for three hours more. She has had no recurrence of the neuralgia since that time.

*Dr. Carson* gave his experience. First case: a woman; she could not sleep, probably from overwork. He gave her gr. xv chloral with perfect success. It, however, failed afterward in this case. Second case: a woman with inflamed piles. She took gr. xv and slept all night; upon a second occasion it produced equally good results. Third case: a man with inflammatory rheumatism; the first dose which he took produced a good effect, but subsequently he took  $\text{ʒss}$  and became very much excited and unmanageable, and attacked his mother, who was attending him. This man could not take opium because of a peculiar idiosyncrasy. Fourth case: a woman suffering with uterine pain and hemorrhage; she took gr. xv, with some relief. She said it affected her as chloroform did, which she had taken by inhalation at some former period.

*Dr. Walton* mentioned some cases in which he had used the remedy. First case: a woman suffering with dysmenorrhœa; she took gr. xv, and in twenty minutes fell asleep. She had headache afterward, and felt unwell for some days. Second case: a woman suffering with abdominal pain after parturition; she took gr. xv, and in thirty minutes was entirely relieved, and fell asleep. Third case: a child with severe earache; he took gr. x, and in one and a half hours was quite free of pain. Fourth case: a man with delirium tremens, who had not slept for thirty-six hours. He had taken potass bromid, etc., without benefit. There was given to him  $\text{ʒi}$  of the remedy, and in two hours he fell asleep, and slept for four hours. He had a convulsion before going to sleep. Fifth case: a patient with traumatic injury; he took gr. xv, and was relieved from pain. *Dr. Walton* said that he had met with no unpleasant effect except in the first case.

*Dr. Dawson* mentioned a case in which he had used the remedy. The patient was a literary man, who suffered from vigilance and



want of sleep; he took gr. xv and slept, and has taken the same quantity every other night since with excellent results. The sleep following the use of the remedy is quite refreshing.

*Dr. C. O. Wright* said that he had given the hydrate of chloral in a case of neuralgia. He had given gr. xv, and repeated it in two hours afterward, without any relief. It had produced some numbness.

*Dr. Patton* considered that the want of success in many cases depended on the small doses given. He thought that it should be administered in large doses, as recommended by foreign authorities.

*Dr. Thornton* regarded its effects as the same as those produced by chloroform. He was of opinion that it would not be found very safe, and that it should be used with caution. He had seen it used and heard it extolled by Bouchut of Paris, but as he was a very enthusiastic person, what he might say should not be considered as so perfectly reliable as to the statements of some other observers.

*Dr. Conner* stated a case which occurred in the practice of Dr. Gobrecht. Gr. xxx vj of the chloral were given, and after an interval gr. x viij more. It was followed by coma which lasted for several hours. The patient was suffering from lead disease.

*Dr. Walton* remarked that English practitioners used it in much smaller doses than the Continental physicians.

*Dr. Tibbals* stated that he had been told by Dr. Hittner that he used chloral in gr. doses with as much benefit as if he had used larger quantities.

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DR. DIEULAFOY'S "ASPIRATEUR SOUSCUTANE."—Under this name an instrument has been suggested, by means of which effusions into synovial or serous membranes, collections of pus or blood, and even hydatid sacs, may be safely evacuated. It consists of an instrument resembling a subcutaneous injection syringe, with a terminal and a lateral tube fitted with stopcocks, to which a *capillary* trocar can be fitted, so that after withdrawal of the morbid liquid an injection may be practiced without removing either the trocar or the pump.—[*Medical Times and Gazette*, Nov. 20, 1869.]

## Correspondence.

LETTER FROM DR. BLACKMAN.

*Observations Suggested by the Perusal of the Report of a Recent Case of Ligature of the Femoral Artery, for Elephantiasis.*

MR. EDITOR:

Prof. Bauer has reported, in the *St. Louis Medical and Surgical Journal*, for November, 1869, a case of elephantiasis of the left inferior extremity, in which he ligated the femoral artery, on the 16th of June of the same year. The operation "reduced the affected extremity to almost its ordinary size and temporary usefulness; but it is equally clear," adds the report, "that the extremity has not as yet returned to its normal *status*." Prof. B. expresses his apprehension and doubt as to the permanency of the improvement, and remarks that he shall keep his eye upon the patient for some time to come, and continue the compression of the limb by means of a lace stocking. In reviewing the history of this operation, he refers to the "encouraging result" which followed Prof. Carnochan's first operation, on the 22d of March, 1851, which, however, "did not excite the interest nor meet the favor of the profession. \* \* \* The venerable Prof. Gross," he remarks, "is still waiting for further developments, meanwhile observing the policy of masterly inactivity." Prof. Bauer's patient, a Scotchman, had been subjected to an operation for the removal of a "tumefied and hypertrophied scrotum," which, it is stated, had become so ponderous that he was disabled from earning his livelihood. The operation was performed by Prof. Syme, in the Edinburgh Royal Infirmary, on the 26th of August, 1866. The left inferior extremity, which had been attacked simultaneously with the scrotum, some three years before this operation, spontaneously diminished so much during the after-treatment, "that there was hardly any trace of the enlargement;" and in the report of this case in the *Edinburgh Medical Journal*, for November, 1866, Prof. Syme thus expressed himself:

"Had the femoral artery been tied, this spontaneous improvement would doubtless have been attributed to a procedure that, so far I can see, has no foundation on any sound surgical principle."

Prof. B. has availed himself of the statistical table reported by Dr. Fischer, of Hanover, in Virchow's *Archiv fur Pathologische Anatomie*, Berlin, 1869, making, with his own, twenty-two cases in which the main artery of the part has been ligated since Prof. Carnochan's first operation in 1851. According to this table, it would appear that there were eleven cures, two marked improvements, and seven failures; and in commenting upon these reported results, Prof. B. very properly observes that inasmuch as relapses had taken place as late as eight, eleven, and fourteen months, the stated cures after one month and three months must be received with reservation. He adds: "Positively, but four cures are vouched for, by respectively eighteen months', three, four, and eight years' duration." He admits that the cases hitherto reported are altogether insufficient to determine the true value of the operation, and declares that it is proven that it is no infallible remedy for the disease, but only a most valuable auxiliary and palliative. In another part of his report he remarks:

"Considering the fact that American surgeons have almost entirely and conspicuously ignored the ligature in elephantiasis arabum, it seems but just to the meritorious author to call once more the attention of the profession to this serviceable operation by adding a new proof of its usefulness."

Prof. B. has overlooked the unsuccessful case reported by Dr. McGraw in the *Detroit Review of Medicine and Pharmacy*, November, 1868, and surely can not have read the article on elephantiasis in Prof. Gross's *System of Surgery*, in which it is stated that the author was present during the summer of 1857, when Dr. Campbell, at the Philadelphia Hospital, performed the operation upon a negro, aged about fifty, who had long been affected with the disease in one of his legs, "but the result was not at all encouraging." He awards great credit to Prof. Carnochan for his "laudable efforts," but remarks, that although all of Prof. C.'s patients, three (four) in number, were much benefited, it was doubtful whether in any a complete cure had been effected. He adds that the operation, if performed early in the disease, might be worthy of further trial, if conjoined with the use of sorbefacients and the bandage; but that he should certainly not feel inclined to recommend its indiscriminate employment.



Prof. Bauer distinctly admits, that the number of cases in which the ligature of the main artery has been tied is "altogether insufficient to determine its full therapeutical value," and it can not be a matter of surprise, therefore, that "the venerable Prof. Gross is still waiting for further developments," if not observing a "policy of masterly inactivity!" Was it not in consequence of the fact, established by Dr. Fischer's statistics, that in the majority of the cases reported, the operation had proved only "an auxiliary and palliative," and that in some the results had been most disastrous, that Prof. Bauer's own countryman, Dr. Fischer, was induced to recommend compression as a substitute for the ligature? Prof. Bauer observes that it is remarkable that both cases of death (10 and 11 of Dr. Fischer's table) occurred in the practice of Prof. Fayrer, which unfavorable result, he adds, according to Wilson, is attributable to endemic and noxious influences. He states also that in one of them the circumference of the limb had lost five inches by the use of the ligature. Dr. Fischer quotes from the *Edinburgh Medical Journal*, Nov. 1865, and the *Journal of Cutaneous Medicine*, No. 1, the results of Dr. Fayrer's operations. Referring to the *Clinical Surgery in India* by Dr. Fayrer, published in London, in 1856, at pp. 688, 706, we find a full report of this surgeon's cases. The first was "a healthy looking man," æt. 30, the right leg affected only below the knee, and the greatest swelling just above the ankle. The femoral artery was ligated February 25th, and the patient died March 15th, of a "form of toxæmia," which, says Prof. F., "I have endeavored to describe in a former paper on pyæmia, the result of osteomyelitis." Three days before his death "the tumor" was four inches less in circumference than when he was admitted into the hospital. Prof. Fayrer's second patient was a healthy looking, slightly made man, about 45 years of age." The leg and foot only were affected, "the disease not extending above the knee." The femoral artery was ligated June 22, 1865; on November 9, Dr. Fawcett reports to Dr. Fayrer that "the leg appears to me somewhat less than before the operation, but the difference is scarcely perceptible." In view of the above report, showing, says Prof. F., that the disease, at the best was only temporarily arrested, "it is a very important question for consideration, whether so grave a risk as that of ligature of the femoral artery should be incurred for so little benefit." But as I before remarked, there is not sufficient evidence in these cases to justify a decided opinion, either for or against the



operation, and I consider it to be still *sub-judice*, waiting farther investigation and trial" (p. 706). From which it would seem that Prof. Fayrer, like "the venerable Prof. Gross," to employ the expressive language of Prof. Bauer, is still waiting for further developments!

During the nineteen years which have passed since Dr. Carnochan performed his first operation, it has been repeated by him in no less than four instances, and it has also been performed by Dr. Campbell at the Philadelphia Hospital, by Dr. Ogier, of Charleston, S. C., by Dr. McGraw, of Detroit, and we have ligated the femoral artery on both sides for elephantiasis of the lower extremity. Our operation was performed upon a colored man by the name of Johnson, at the old Commercial Hospital, during the session of 1858-9, as we are informed by Dr. B. F. Miller, of this city, and who at the time was one of the resident physicians of the hospital. Secondary hemorrhage occurred on the left side, but was readily controlled by pressure. During the confinement to bed attendant upon both operations, both limbs diminished materially in circumference, but after a few months it was evident that the disease was returning, and in the course of a year they were as large as before the operation. He died at the City Infirmary, in 1860, exhausted from chronic diarrhœa, and I am informed by Dr. Neal, now of Dayton, but then resident physician of the Infirmary, that during the extreme emaciation which preceded his death, the lower extremities became of almost natural size.

The above case, together with those which have occurred in the practice of Drs. Ogier, Campbell and McGraw, show that the operation has been if "almost," not "entirely ignored" by American surgeons, and although we plead guilty to neglect in so long delaying the report of our operations, we must be permitted to express the opinion that the statistical value of Prof. Bauer's case would have been greatly enhanced had a longer period intervened between his operation and the date of its publication. Again, why not have given the chance for the spontaneous improvement, which followed the operation on the scrotum performed by Prof. Syme? The case of Dr. Redfern Davies, of Birmingham, England, reported in the *American Journal of Medical Sciences*, April 1863, and not included in Dr. Fischer's table, is also open to the criticism that, from the incompleteness of its details, no definite opinion can be formed of the real improvement effected by the operation. To

state simply that the ligature came away on the twenty-first day, and that there was "almost a complete diminution of the size of the limb to its natural dimensions," is but to repeat what has undoubtedly occurred in the majority, if not in all, the cases in which Prof. Carnochan's method has been adopted. An immediate improvement, followed, however, in the course of a few months, by a renewal of the disease, at last in the greater number of instances, is sufficient to authorize the statement of Prof. Gross, that while the size of the limb may be reduced by cutting off the main supply of blood, the operation can not restore the limb to its healthy condition, and we venture to assert, that, as ligature of the femoral artery is in itself a dangerous operation, it should yield to compression of the main artery in the treatment of elephantiasis, conjoined with compression of the limb, and "other sorbefacients."

Very respectfully,

Cincinnati, Jan. 25, 1870.

GEO. C. BLACKMAN.

*Letter from New York.*

December 18, 1869.

EDITOR LANCET AND OBSERVER: In accordance with the plan adopted in my first communication I may mention that among the many operations for the relief of vesico-vaginal fistula which I have seen performed by Dr. T. A. Emmet, Surgeon to the Woman's Hospital, the most interesting to me was, first, that for the very small openings, so small, indeed, that milk had to be injected into the bladder to find them. The presence of this fluid in the vagina indicating their locality as it oozed through the perforations.

It was important, the doctor said, to denude the tissue extensively anteriorly and posteriorly to a small opening, else the urine would escape at either end of the folds made in the wall of the vagina by the sutures. Hence, for a very small opening he employed not less than six or seven sutures, five to the inch.

Secondly, I may mention the very large fistulæ. In this class was a case in which nearly the whole anterior wall of the vagina was gone, a large fistula in the bladder and the urethra laid open throughout its remaining extent. The fundus of the bladder protruded through the vulva when she walked about the room.

He began the repair of this extensive lesion by constructing a urethra, composed in part by the original lacerated one and of tissue anterior to it, so as to increase its length to probably one and one-half inches.

A celebrated gynecologist, to whom I spoke of the case, said that he would have made that the last part of the operation, adding by way of parenthesis, "but Emmet had a reason for it."

A few days ago I saw Dr. Emmet perform his operation of elytrorrhaphy for the relief of procidentia uteri. The cervix was immensely hypertrophied. He said the hypertrophy would spontaneously diminish when the uterus was sustained in situ. This opinion was verified, a week after the operation, at the time of removing the sutures, as the cervix was found to have already diminished considerably in size. He said the operation would have to be repeated as soon as the size of the cervix became normal.

Through the kindness of Dr. J. Marion Sims I obtained the opportunity of learning the general mode of treatment given the patients of the out-door department of the Woman's Hospital by Dr. Winston, the attending physician :

EXAMPLE CASE—"Cork-screw canal," or twisting of the canal, or stricture of the os internum. Treatment: Dilate with metallic bougies. Would use sponge tents if the woman were staying in the house.

CASE—Subinvolution of the uterus with catarrh of the cervix. The cervix very large and hard in the center. Treat.: Churchill's tinct. iodine inside and outside of the cervix. The canal is  $3\frac{1}{2}$  or 4 inches in length, but the iodine was not introduced into it beyond one and one-half inches.

CASE—Anteflexion with sterility. Treat.: Dilated the cervical canal with metallic bougies. The cervix should be incised. To relieve a slight catarrh caused by the bougies liq. ferri persulph. was applied to the canal.

CASE—Vaginitis, caused by uterine catarrh. In this case the vaginal condition, though not specific, would communicate gonorrhea, or the secretions applied to the eyes would produce ophthalmia. Treat.: He would like to apply chromic acid if proper care could be taken of her for a few days, but as it was he applied sol. persulph iron to the cervical canal. To relieve the vaginitis sol. argent. nit. was used followed by glycerine and water.



I thought I would stop at this as these will give you an idea of the mode of disposing of these cases, but I must give you one more:

CASE—Speculomania, as Dr. Thomas terms it, which means an hysterical mania to be “speculumed.” Treat.: Nothing; or if there be a slight uterine catarrh, apply sol. ferri persulph. and glycerine, equal parts of each.

I may here remark that at the Woman’s Hospital the patient is placed on a table for the purpose, in the semiprone position, and Sim’s speculum used. Prof. Elliot, of the Bellevue Hosp. Med. Col., recommends for catarrh of the vagina the liq. alum. comp. He has seen ovaritis result from specific vaginitis. For inflammation of the cervix and ulceration of the os he recommends, in some cases, blistering the cervix with cantharidal collodion, followed by tannin and glycerine on cotton in the vagina. Cotton wet with Churchill’s tinct. of iodine introduced and left in the canal of the cervix is also useful.

Enlarged cervix, from chronic inflammation, may be treated by amputation. He thinks the stump allowed to heal by granulation, will do about as well as to cover it with mucus membrane.

In employing the actual cautery he recommends a white heat, which is painless.

Prof. Budd, of the University, at a college clinic, applied the actual cautery to the os uteri in a case of enlarged cervix. A few days after its application I was somewhat surprised to see so slight a manifestation of resulting inflammation. Indeed, there seemed to be simply a drain established from that deep ulcer; its margin being neither red nor swollen.

In a case of cervical endometritis, with ulceration of the os, cotton wrapped round a probe and wet with chromic acid, was introduced into the canal. The cotton slipped off the applicator and was left in the canal, as Prof. Budd said it would do no harm.

Prof. Thomas, in his course of lectures at the Col. of Phys. and Surg., has just completed the subjects of versions and the application of the forceps. He spoke first of external version; secondly, of bimanual version, or the mixed method, and thirdly, of internal version.

He said he had performed external version once after the rupture of the membranes. It can not be done, however, after the waters break, if the uterus is contracted. You can turn easily by this method, or not at all. Its practicability, or the reverse, may be determined in two or three minutes.



In very fat women failure may be expected. If cephalic can not be effected podalic version may be tried.

He succeeded in one case in converting a breach into a head presentation by external manipulation.

After podalic version, by any of the methods, and the pelvis is delivered, he recommends to proceed at once to bring down the arms of the child. He says, "bring them down even if you have to break the humeri" to effect your purpose. They are little else than cartilage and will unite in two weeks, so it is better to break them than to allow the child to die for want of rapid delivery. Then bring down the arms, pull the cord down a little and deliver the head by putting your fingers into the child's mouth, elevate the body of the child over the pubis of the mother, and pull it away while your assistant makes compression above. This he insists must be done quickly. You can not quickly deliver with the fingers of one hand on the cheeks and those of the other against the occiput of the child.

His lectures on the history and application of the forceps were very full and complete.

Although some teachers insist that the left blade should always be introduced first, yet, he says it makes no difference, which, excepting that the blade that is likely to give you the most trouble to introduce is the one which should be first chosen. If the head be in the cavity of the pelvis, or at its inferior strait, the forceps should be applied *in relation to the head of the child*.

If the head of the child be in the superior strait, or above it, the forceps should be applied *in relation to the pelvis*, regardless of the position of the head.

Prof. Thomas removed a submucous fibroid tumor from the uterus yesterday at the college clinic. The cervical canal having been largely dilated with sponge tents preparatory to the operation, he made an ineffectual attempt to apply the écraseur on account of the indistinctness of the pedicle, its being sessile in character. He then, with the index finger of the left hand in the uterus as a guide, introduced the scissors and clipped off a piece of the tumor, and then gouged out the remainder with his finger. He used his finger as a gouge because he had no instrument for the purpose at hand, besides it was safer.

In the course of a lecture on the medical treatment of fibrous tumors of the uterus, a few days ago, at the Bellevue Medical College, Prof. Elliot remarked that one of these tumors disappeared

while the patient was taking muriate of ammonia. Chloride of calcium has been recommended by Mr. Spencer Wells to cure them. A short time ago he examined a woman having two or three subserous fibroid tumors of the uterus, and she requested him to be particular as to their size, as Spencer Wells, six years ago, had told her how large they were then, and prescribed chloride of calcium. The professor then told her their present size, which she said was what Wells told her at the time he examined them. How much good the medicine did in arresting their growth is, of course, conjectural.

Dr. J. Marion Sims is not connected with the Woman's Hospital at present excepting as consulting surgeon when called on. Although having returned from Europe but a short time ago his private practice appears to be already large. He told me he designed visiting the far west next summer, by way of relaxation. Although he is nearly fifty-seven years of age yet he looks younger, and is, as he terms it, "in a good state of preservation."

Through his politeness I had the pleasure of seeing him incise the cervix for the relief of dysmenorrhea and sterility, dependent upon ante flexion of the uterus. The point of flexion was supravaginal. The patient being very excitable, ether was administered. He objected to its administration as a rule in this comparatively painless operation. He said this was the third time he had ever used it in this operation.

With an universal uterotome he incised the cervix laterally one incision on each side, a little posteriorly, and one anteriorly. He then introduced cotton, wet with liq. ferri persulph. into the cervix and left it there; tamponed the vagina, and we were on the street again in a few minutes. He operates with astonishing dexterity, and manipulates the uterus with as much apparent facility as though it were an external member, or organ. N. D. G.

## Editorial.

### *Public Medical Library.*

It has long been the wish of the Academy of Medicine of this city to establish a Library and Periodical department, under satisfactory auspices. Though not brought about exactly as was originally contemplated, the project is now about a completed success. We have not room to print the extended reports that from time to time give the history of this important measure—but in a condensed manner give the essential points.

It is well known that the Public Library of Cincinnati has, in course of erection, a very complete and magnificent building; in view of this a committee, on behalf of the academy, was empowered to confer with other parties with a view to securing the establishment of this medical department. Drs. W. B. Davis and C. G. Comegys were this committee. These, in connection with Dr. W. H. Mussey, for the "Mussey Medical Library," and Drs. P. S. Conner, I. S. Dodge, and M. B. Wright, for the Medical College of Ohio Library, succeeded in making complete and satisfactory arrangements with the Board of Managers of the Public Library, to the following effect:

The "Mussey Medical Library" is deposited on certain conditions—to have a separate alcove, and Dr. Mussey agrees to make annual additions. The library of "Medical College of Ohio" is likewise placed in deposit. The Academy of Medicine agree to contribute to the department thus established \$300 per annum, and the Public Library agree to contribute a certain amount annually as part of the general plan of a public library.

A standing Committee from the Academy controls the disposition of its contributions, and in view of this final agreement, the Library Committee, when appointed (Dr. W. B. Davis, Chairman), addressed a circular to all the medical publications of America, inviting each publisher to place his journal on the library table at a reduced rate.



The Committee report to the Academy as follows, in conclusion of their work :

"Thirty-three (33) journals have replied to the circular. Seventeen (17) of this number place the Academy on their *free list*. All the remainder, *save one*, make a very liberal reduction from their subscription price. The *exceptional one* is the "Medical Record" of New York, Wm. Wood & Co. This reply explains itself:

"New York, Jan. 15, 1870.

"Inasmuch as placing your Academy upon the free list of the 'Medical Record' would probably result in losing the thirty or forty subscribers we have in the places named, or a part of them, we do not see our interest in so doing. Our terms are \$4 per annum in advance. Respectfully, WM. WOOD & CO."

(The Committee report that the publishers have made liberal offers to others, and concludes with the recommendation to subscribe for the library at the regular rates.)

"The Committee are of the opinion that the thanks of the Academy are due, and should be formally given to those journals who have made deductions in our favor, as well as those who have placed us on their *free list*, and they think it due the latter journals that their names should be entered upon the records of the Academy, with honorable mention of their courtesy and liberality. To that end we give their names:

"*Boston Journal of Gynecological Society*; *Pharmacist*, Chicago; *Boston Medical and Surgical Journal*; *Druggists' Circular*, of New York; *Medical Examiner*, of Chicago; *Lancet and Observer*, of Cincinnati; *Medical Gazette*, of New York; *Dental Cosmos*, Philadelphia; *Medical Herald*, Leavenworth; *American Practitioner*, of Louisville; *St. Louis Medical Archives*; *Oregon Medical and Surgical Reporter*; *New Orleans Journal of Medicine*; *Detroit Review of Medicine and Pharmacy*; *Baltimore Medical Journal*; *Galveston Medical Journal*.

"We recommend the adoption of the following resolutions:

"*Resolved*, That the thanks of the Cincinnati Academy of Medicine are due, and are hereby extended to the editors and publishers of the above medical journals.

"*Resolved*, That the Secretary be requested to transmit a copy of the same to the editors and publishers of said journals.

[Signed]

"W. B. DAVIS,

"Chairman of Library Committee."



It will thus be seen that we have fairly inaugurated the magnificent basis of a fine medical department to the Public Library of this city, on such terms and regulations that it must very soon become an important and unusually attractive feature of the medical material of our city.

**Commencements of Medical Colleges.**—We have delayed the issue of this number of the journal that we might announce the graduation of students in Cincinnati.

Monday night, Feb. 28, the *Miami Medical College* held its Annual Commencement, with thirty-seven graduates. The exercises were held in the large lecture room of the College, prayer being offered by Rev. J. L. Robertson. In the absence of Bishop McIlvaine, President of the Board of Trustees, the degrees were conferred by the Secretary, Dr. John Davis, with brief but pertinent remarks.

Prof. Taylor delivered the usual valedictory address on behalf of the faculty, of which it is sufficient to say it was unusually appropriate, and much of which we hope to lay before our readers next month at the special request of the class.

The Dean then delivered to each graduate a copy of the *Code of Ethics*, with the following remarks :

*Gentlemen of the Graduating Class* : As we are now about to complete the severance of the last official link which has bound you to the faculty of the Miami Medical College, and by which separation you are placed under obligation to the medical profession of the world to obey the laws for its government, I wish to present to each of you, as Dean, on behalf of the faculty, a parting memento : a copy of the Code of Ethics of the American Medical Association, which is the highest medical authority of our country. We hope you will study carefully its contents, and conform strictly to its precepts in your intercourse with the profession of which you are now members.

Dr. Davis then stated, on behalf of the Board of Trustees, that the faculty had purchased the ground, erected the edifice, accumulated the illustrative material of the college, and all these were now free from any embarrassments of debt.

The exercises closed with a large gathering of the graduates, faculty, and friends of the college at the residence of Prof. Williams.

The following is a list of the graduates :

NAME.	STATE.	THESIS.
A. D. BENDER .....	Cincinnati .....	Gastritis.
Z. T. BAUM .....	Pittsburg, Indiana .....	
Z. BROWN .....	Waynestown, " .....	Valvular, Disease of the Heart.
ROBERT H. CHILTON .....	Albany, Kentucky .....	
THOMAS L. CATHERWOOD .....	Moweaqua, Illinois .....	Gelsemium Sempervirens.
EDWARD C. CRUM .....	Dayton, Ohio .....	Natural Labor.
JOHN T. COX .....	Santa Fe, Missouri .....	
J. J. COLE .....	Trafalgar, Indiana .....	Diseases of Women.
E. CAIN .....	Greensboro, " .....	
B. F. ERDMAN .....	Cincinnati .....	Paralysis of Vocal Chords.
S. S. EBERHART .....	Wooster .....	Acute Pleuritis.
OTTO FULS .....	Cincinnati .....	Opium.
S. A. GILLAM .....	Pittsburg, Indiana .....	Inflammatio Ossis.
JOHN P. GREEN .....	Zanesfield, Ohio .....	Insolation.
L. T. GLENN .....	Hillsboro, " .....	Typhoid Fever.
FRED. GLOCK .....	Middletown, Indiana .....	" "
HARRISON HATHAWAY .....	Reedtown, Ohio .....	The Frauds of Medicine.
W. C. HENRY .....	Wooster, Ohio .....	Acute Pneumonia.
JOHN S. JONES .....	Thurman, " .....	Epilepsy.
J. M. JOHNSON .....	Smithville, Indiana .....	Desquamative Nephritis.
EUGENE S. JUDKINS .....	Lexington, Ohio .....	Acute Gastritis.
PETER A. KECK .....	Cincinnati, " .....	
J. F. LEWIS .....	Virgil City, Missouri .....	Pelvic Cellulitis.
B. G. KIMMELL .....	Aledo, Illinois .....	Pleuritis and Pneumonia.
J. H. LA RUE .....	Salem, Kentucky .....	
IRA A. E. LYONS .....	Huntington, Indiana .....	Digestion.
J. N. McCORMICK .....	New Haven, Kentucky .....	
R. W. MAXEDON .....	Vallene, Indiana .....	
S. C. PRESTON .....	Greencastle, " .....	
R. C. TALBOT .....	Sylvania, " .....	Milk Sickness.
C. M. RILEY .....	Kingston Center, Ohio .....	Electricity.
J. T. SELLARDS .....	Old Town, Kentucky .....	Syphilis.
T. E. TAGGART .....	Cincinnati, Ohio .....	
E. H. TRICKLE .....	Parkersburg, West Virginia .....	
A. H. WILSON .....	Red Wing, Minnesota .....	
WILLIAM WEBER .....	Huntington, Indiana .....	
AD EUNDEM DEGREE.—B. ROEMER, M. D. (of Warburg) Kanawha Salines, W. Va.....Tetanus.		

On Tuesday morning, March 1, at 11 o'clock, the *Medical College of Ohio* held its Annual Commencement at the old College Amphitheatre on Sixth street.

Rev. Mr. Haley opened the exercises with prayer, and Judge Dickson, as President *pro tem.* of the Board of Trustees, addressed the graduates and delivered the diplomas.

Prof. C. D. Palmer addressed the class on behalf of the Faculty. His topic was the trite of "Professional Success," but was handled in a vigorous manner.

The following is the list of graduates: D. R. Barley, L. W. Bishop, Isaac W. Cable, Ohio; J. W. Clark, Ky.; R. J. Clark, Ind.; Calvin S. Cooper, W. Va.; L. Corey, Ind.; H. D. Danford, Ohio; Isaac Davis, Ky.; J. F. DeBra, Ohio; J. C. DeS. Dillon, Ind.; J. L. Dowdell, T. J. Edwards, Ky.; T. J. Farrell, E. J. Galbraith,

Ohio; Milton Godbey, Missouri; Noble Hall, Ohio; Wm. J. Hall, Ind.; Geo. W. Harman, W. C. Hughes, J. H. Hunt, Philo E. Jones, Ohio; Thos. B. Jones, Ind.; E. W. Keeney, Ky.; W. C. Lenhart, Ohio; G. W. Lutz, Ind.; B. H. Mackall, Ohio; Isaac Mayfield, Ind.; L. H. Medaris, Ohio; J. W. Miller, L. H. Murphy, Ind.; Aaron Myers, Ohio; D. W. McClaugherty, W. Va.; T. R. McClintock, Ohio; E. L. McJilton, Ill.; R. H. McKee, J. N. McMaster, James McPeak, Ohio; Newell Patterson, Ill.; H. J. Peter, Ohio; J. H. Phillips, Ky.; J. H. Potter, Ill.; E. P. Ritchey, Ind.; T. S. Roberts, D. Robeson, Ohio; J. H. Sale, Ind.; A. Schwagmeyer, Hy.; R. Z. Seeds, Ohio; Jas. S. Shields, Ind.; Jas. E. Smith, Chas. Snyder, Ohio; John A. Songer, Ill.; F. Stitch, F. R. Van Eaton, Ohio; J. W. Winn, Ky.; Geo. Woodward, Ohio; C. H. Wright, Ind.

The Commencement of the *Cincinnati College of Medicine* was held on Thursday evening, February 24. Dr. Lilenthall delivered the diplomas to the graduates.

**Summer School Instruction.** In the January number of this journal we announced the plan of *three months* lectures and instruction which will be given in the *Miami Medical College*, commencing about the middle of March, conducted as has been usual for some years past.

We are glad to state that gentlemen connected with the *Medical College of Ohio* will also give a special course of instruction lasting *two months*, and embracing topics of interest to all students. Summer instruction, as supplementary to the winter course, is beginning to attract attention generally all over the country as an important part of the systematic drill of medical pupilage, and deserves still more favor than it has yet received. The stimulus to regular study, the better clinical opportunities, and the privileges for practical anatomy must more and more make these spring courses attractive. For several years many students have remained for these advantages during most of the spring.

We are glad to say in this connection that *individual* teachers are increasing in number in our city; this must come by and by in Cincinnati, as in all the chief cities of this country, to be a prominent feature of medical instruction. Our friend Dr. Carson has had this winter a good class of private pupils in physical diagnosis, and we know of no one better fitted to conduct such a class. Prof. Norton is now prepared to receive private pupils in the practical study of chemical analysis: and so we continue to progress.



*The American Practitioner* is the title of our friend Parvin's new journal. First, *Cincinnati Journal*, under the auspices of Blackman, Parvin & Bartholow; then, *Western Journal*, and removed to Indianapolis, under the exclusive care of Parvin; now removed to Louisville, it becomes *American Practitioner*, and the editorial control is divided between Profs. D. W. Yandell and T. Parvin. The typographical appearance of the new journal is simply beautiful. In plan it aims to be an exponent of *practical medicine* in America on the plan of Ainstie's *British Journal*, the name and style of which is adopted. The papers in the first number are mature, and such as will give character and value to any medical journal; and yet we can not help but think our friends have made a mistake. In our judgment the *plan* of the "*Western*," for *practical* men is better, and all the variety and individuality of two such *individual* men as these two editors is sunk in the new idea. Readers of medical journals want the varied *news, politics, and views* of Yandell and Parvin.

**Omitted.**—The letter of Prof. Blackman and our New York letter were in type for last month, but crowded out for want of space. So, too, several editorials appear now somewhat out of date for the same reason.

**Special Note** is directed to the old standing card of the preparations of Granier & Co., on sale by Prichard, of New York. By some inadvertance it has been dropped out of our advertising pages for a few months.

**Braithwaite's Retrospect.**—Part LX. January, 1870, is at hand—as usual, full of choice condensed contributions to medicine and surgery. Price, \$1.50 each for half-yearly parts, or \$2.50 per year.

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## Reviews and Notices.

***A Compend of Materia Medica***, and Therapeutics, for the use of Students. By JOHN C. RILEY, A. M., M. D., Prof. of Materia Medica, etc., in the National Medical College at Washington, etc. Philadelphia: J. B. Lippincott & Co., 1869.

Dr. Riley has complied with one of the pressing wants of the medical student, and afforded in the moderate size volume before us the essentials of Materia Medica, in a shape easily grasped by the busy student in term-time. The order is that usually adopted by teachers, and will, therefore, prove convenient as a full syllabus of the lectures. It has certain imperfections, but these are only after our way of thinking, and all criticism needs be accompanied with a—but.

For sale by Robert Clarke & Co.

***Annual Report of the Board of Regents*** of the Smithsonian Institution, for the year 1868.

We are indebted to Mr. Garfield for a copy of this report. This volume is intended to exhibit the operations, expenditures, and condition of the Institution for the current year. Besides very much that is of peculiar interest to the man of science, there are memoirs of Cuvier, Oersted, Encke, etc., pleasant reading for any man of letters. The object of Mr. Smithson, as expressed in his will, was the *increase* and *diffusion* of knowledge, and those who have not looked into the matter will be surprised at the quiet work the Institution has accomplished since its organization, now about twenty years.

***The Wasting Diseases of Infants and Children.*** By EUSTACE SMITH, M. D., Lond., etc. Philadelphia: Henry C. Lea, 1870.

The volume before us is small, but it contains a good deal of matter. With its general title very necessarily there are embraced many important topics. The introduction contains much valuable advice for the management of children, together with agents of value in varied indications. Then we have succeeding chapters on atrophy, diarrhœa, vomiting, rickets, syphilis, worms, tubercu-

losis. We think practitioners will find this a very desirable contribution to the literature of the diseases of infancy and childhood.

For sale by Robert Clarke & Co.

***A Treatise on Intra-Ocular Tumors.*** From original clinical observations and anatomical investigations, etc. By H. KNAPP, M. D., late Professor of Ophthalmology, etc., in Heidelberg. Translated by S. Cole, M. D., of Chicago. New York: Wm. Wood & Co., 61 Walker street, 1869.

This a handsome book devoted to an important department of ophthalmology. It contains a finely-executed chromo, and several lithographic plates. Part I is occupied with the consideration of encephaloid of the retina; seven illustrative cases are detailed, and a section on the nature and treatment. Part II contains further cases on sarcoma of the choroid, with the pathology, clinical description, etc. Dr. Knapp is already well known in this country as a rising ophthalmologist, and his little book will be regarded with favor.

***Percussion and Auscultation*** as Diagnostic Aids. A manual for students and practitioners of medicine. By Dr. CARL HOPPE, and translated by Prof. L. C. Lane, M. D., of San Francisco. Philadelphia: J. B. Lippincott & Co., 1869.

The title-page of this little book expresses quite fully all that can be said about it. The arrangement is good, carefully condensed, and clearly expressed; the translator has done his part well, and we hope the book will sell so as to reward him for his trouble.

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Sulphate of Morphine.....	1-12 "	Acetate Morphine.....	1/3 "
Corrosive Sublimate.....	1/2 "	Digitaline.....	1-24 "
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THE CINCINNATI  
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E. B. STEVENS, Editor.

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Original Communications.

*Art. I.—Observations on some points in Herniotomy.*

By O. G. SELDEN, M. D., Shanesville, O.

In operating for strangulated hernia, especially if the hernia be of long standing, and only partly reducible, it is common to find the omentum which almost always forms a large portion of the tumor, thickened and indurated, so much as to have entirely lost the delicately reticulated structure, which marks its normal condition, and to the superficial observer, presents indications of degeneration and disease. The proper disposition of the omentum when found in the condition above described, will form the subject of the present paper. Almost every modern author on Surgery has said something on the subject, but their opinions are often conflicting, and their directions most unsatisfactory. And yet, the proper proceeding is of prime importance to the success of an operation, and consequently, to the safety of the patient. Before giving any opinion of my own, or detailing or referring to my experience in the premises, I shall give the opinions and practical directions of those authors to whose works I have access. Remotely situated as I am from the centers of medical literature,



I have only within reach such works as are contained within my private library. From these I quote as follows :

John Hunter, who wrote almost exclusively on the "Principles of Surgery," remarks on this subject: "In this case we should contrive that a portion of the epiploon shall remain at the bottom of the wound, and if it is not protruded, I think it would be best to find it if possible ; in this way by adhesion taking place around the opening, the general cavity would be excluded."—Principles of Surgery, p. 22.

From Sir A. Cooper's work on Hernia, p. 106, we quote as follows: "When the intestine has been returned, the omentum is to be examined with attention, and if it is in a healthy state, and not of very considerable bulk, it should be returned into the abdomen by as slight pressure as possible. But if it is very bulky, a part of it should be removed, which may be done with the knife, with great freedom, and if properly managed, without any danger. Some small arteries always bleed, which are to be secured by a fine ligature, and when the hemorrhage is stopped, the omentum is to be returned into the abdomen with the divided surface applied to the mouth of the sac, from which the ligatures are suspended, and thus it forms a plug which shuts up its cavity." Again in his "Surgical Lectures," p. 419, vol. 2, Sir A. Cooper remarks: "If a very large portion of omentum be protruded, a part should be cut away, which may be done without any danger to the patient by means of the knife."

In Samuel Cooper's "First Lines of Surgery," p. 108, we read: "As soon as the intestine has been reduced, the omentum, if not diseased, is next to be replaced. However, when it is much thickened or indurated, a portion may be cut off. If any small arteries bleed, they are to be tied with a fine ligature. This membrane is sometimes found converted into a large, indolent, fleshy mass, weighing two or three pounds. Here it should be cut away and its bleeding vessels tied."

The same author in his "Surgical Dictionary," says, quoting from Hey: "In an entro-epiplocele, when the omentum is much diseased, thickened and indurated, as it is frequently found to be after remaining considerable time in the hernial sac, the morbid part should be cut off. Its reduction in this circumstance would be highly improper, both because an immoderate enlargement of the wound would be necessary in order to put the diseased part back into the abdomen, and because when reduced, it would in all

probability, excite inflammation of the surrounding parts and bring on dangerous symptoms."

Bransby Cooper in his "Lecture on Surgery," p. 420, discourses as follows: "The condition of the omentum is as much a matter for the consideration of the surgeon as the intestine itself, for by inflammation, the former, which is naturally a delicate and attenuated membrane, may be converted into a solid mass, totally unfit to be returned into the abdomen. It then becomes a question whether the portion thus altered should be returned into the abdomen. I think it ought to be left in the sac: for if it be removed by incision, it will be necessary to apply a ligature to stop the bleeding from the divided vessels, and that process is very likely to produce peritoneal inflammation."

From South's translation of Chelius, vol. 2, p. 300, we quote the following: "If the omentum be converted into a tangled lump, it must not be returned into the belly, because it requires a too large dilation of the abdominal ring, and this degenerated mass may produce inflammation and even suppuration in the cavity of the belly. The general advice is to tie the omentum above the degenerated parts; to cut it off below the ligature, and return the tied part into the belly, and to fasten the threads externally. The ligature of the omentum, however, causes a new strangulation."

The translator (South) remarks in a note: "I have tied the omentum and cut off the part below the ligature several times, without any of the untoward results, commonly, and as by Chelius assigned to the practice."

In Velpeau's great surgical work, translated by Townsend, and edited by Mott and Blackman, vol. 3, p. 270, we cull what follows: "The reduction of the epiploon is always attended with difficulty. It has almost always undergone some alteration. If such masses were reduced with the viscera, supposing this could be done, there are some of them whose resolution we might count upon, but this could rarely happen, and should they be ever so slightly voluminous, their presence in the abdomen would expose to too many dangers to venture upon their reduction. Their excision is unattended, moreover, with danger, when they are pediculated, as frequently happens, and when it is not necessary to excise them through a sound portion of the epiploon. If their root, moreover, should appear to include vessels of a certain calibre, nothing would prevent our strangulating them by means of a double thread, before completing their excision. Though excision is

more expeditious and satisfactory at first sight, it has been adopted by but a small number of practitioners."

From "Lawrence on Ruptures," 5th London edition, we get opinions and practical directions as follows, p. 453: "If the protruded portion be large, and if it has been long out of the abdomen, the propriety of returning it is questionable, even although it should not be much altered in structure." Page 459: "In proceeding to remove a portion of omentum, we should first unfold it in order to ascertain that no intestine is included, then cut away the morbid part with the scissors or knife, and tie the bleeding vessels." Again, page 462: "Since then the practice of removing diseased omentum, of securing the bleeding vessels, and of returning the remainder into the abdomen, has never produced any injury to the patient, and is not likely to be followed by any ill consequences; it must in the present state of our knowledge be considered the most advisable treatment."

Druitt, 1st American, from 2d London edition, note by Flint, p. 411: "If the omentum be gangrenous, or if it is thickened or indurated, it would, if returned into the abdomen, excite dangerous irritation of the peritoneum. In this case, some surgeons advise it to be left to granulate in the sac, or to cut it off close to the neck of the sac, and leave it there as a plug to prevent further protrusion. Macfarlane and others, on the contrary, recommend it to be cut cleanly off, and all the vessels to be tied with fine silk ligatures, and the end then to be passed quite into the abdomen."

Gross, in his great work on Surgery, says, p. 504, vol. 2: "Retrenchment will also be required when the omentum is much enlarged by interstitial deposits, rendering it impossible to replace it, or when, if restored, it would be likely, on account of its inordinate bulk and tuberculated surface, to cause violent peritonitis. Such a proceeding is far preferable to that of leaving the protruded part in the hernial sac, in the hope of preventing thereby a recurrence of the rupture, a circumstance which although possible, is not at all probable."

In Dieffenbach's Operative Surgery, vol. 2, p. 637, we find the following opinion: "Die verdickung und verhärtung des Netzes im Bruchsack entsteht sehr nach seinem Austritt, auch wenn es noch nicht mit dem Bruchsack verwachsen ist. Unter diesen Umständen, das Netz nach Eröffnung des Sackes Zurück zubringen, wäre ebenso gefährlich als irgend einen andern fremden Körper in die Bauchhöhle einzuführen."



Erichsen, American edition, from 2d London edition, gives the following directions, p. 788: "In all cases of hypertrophied inflamed or gangrenous omentum, the best practice consists in cutting off the mass, as recommended by Sir A. Cooper and Lawrence. Pancoast in his *Operative Surgery*, does not at all mention the subject."

After quoting from so many of the great lights of surgery, whose pre-eminence in its science and art is most unquestioned, and whose right to give the rule to the practice of others is just as little a matter of dispute, it may seem like arrant presumption in me to attempt to say anything in addition to, or in contravention of, the opinions and practice of such great masters of our art. And I should verily be obnoxious to such a charge without a remedy, were it not true that these very men would, like myself, freely acknowledge that the best of us are but apprentices in the great workshop of nature, and if we would master the secrets of her mighty arcana, we must all work together humbly, faithfully, and reverently for the opinions and experience of each other. Progress is not the work of one day, or of one man; but when we all work together patiently and persistently, we may now and then take a step in advance. Encouraged by these reflections, I will now proceed to give my own experience on this point, in Herniotomy, and the opinions which I believe can be logically deduced from it.

In referring to my quotations from the 'recognized standard works on our subject, one is apt to become a little confused by the varying opinions, and consequently conflicting practical directions there presented. I believe that most of the practical rules are correct, and the main difficulty is to properly apply them. There seems to be a strange confounding together of many and entirely different pathological conditions, in which the omentum may be found, and covering them all by the same practical rule. To attempt to bring order out of what presents itself to my mind as indefiniteness, is my object in the present paper.

In old hernia, when a portion of the omentum has been long in the hernial sac, it presents when the sac is opened a variety of appearances, according to the changes of structure which it has undergone. First, and most commonly, we find a mass of tangled fat, of a lumpy feel, apparently agglutinated together, more or less of a pear-shape, and attached to the abdominal omentum by a pedicle, and gradually increasing in size until it assumes the proper shape before mentioned. It is in this form of old hernial omentum, that we find the greatest deviations from its normal



structure. Sometimes it is simple hypertrophy without change of tissue; sometimes it is more or less indurated, and sometimes, though this condition is rare, it has a waxy hardness to the touch. It is in these cases where, according to my experience, we find that condition of the omentum that has been termed *tubercular* and cystic degeneration. Pott reports a case where the process of structural degeneration had gone on, until the hernial omentum presented all the essential characters of schirrus. These are the cases mentioned by authors, where it is impossible to return the mass into the abdomen without too great enlargement of the abdominal ring. Adhesions to the hernial sac are mostly found in this class of cases, commonly at or near the abdominal ring. After dividing the stricture and returning the intestine into the abdomen, it has been my invariable practice to inclose the pedicle of the mass of omentum in a stout ligature at or near the abdominal ring, and cut away the mass below the ligature. I have seen no colicky pains follow such a proceeding, as are recorded by a French author, whose name I have forgotten, and in no case where the practice was followed, was there the remotest symptom of peritonitis. I am acquainted with some, on whom I operated years ago, who are not more subject to enteric disturbances than people in general. Two of them I afterward treated for muco-enteritis, and one in typhoid fever, and in each case they went through the disease well. I should, of course, hesitate to include recently extruded omentum in a ligature—but of that hereafter. The objection made to this practice by the older authors is, that after relieving the stricture produced by pressure of the abdominal ring, we proceed to create another stricture, by inclosing the pedicle of the extruded omentum in a ligature. I do not conceive the objection to be valid, for several reasons. The condition of the hernia, which makes the operation necessary, is not *stricture of the omentum*, for this has probably existed for years, and been productive of but little discomfort. It is this stricture which has produced the hypertrophy of the part, and by its continuance the resulting degeneracy of tissue, and further, by its direct pressure at the ring, has produced the peculiar pear-shaped conformation of the part. Pott, Hey, Dieffenbach, each relate cases where the pressure of the lower edge of the abdominal ring upon that portion of omentum contained within it, has eventually entirely severed the connection between the abdominal and hernial omentum, and the severed and degenerated mass was found in the hernial sac as

large as a hen's egg. But as the result, generally, of violent muscular effort, when the body is in certain positions, a coil of intestine has been forced into the hernial sac beside the omentum already there, and the occurrence is followed by the train of symptoms, that compel us to seek relief for the patient in an operation. Now, ligation of the pedicle of the hernial omentum, is simply placing the part in the same condition it has been for years, with no inconvenience to the patient other than the presence of the tumor caused by the *error loci* of the extruded omentum. As before observed in the eight cases in which I have adopted this rule of practice, no unpleasant symptoms resulted. It is certainly safe, and when even tolerably well done, precludes the possibility of inter-abdominal hemorrhage, which would doubtless prove fatal to the patient. We are sometimes called to a patient who has had strangulated hernia for many hours, and has been under the care of a physician with more zeal than discretion. Here we shall find often that the hernial tumor is the seat of active inflammation, and some of its parts in a condition approaching gangrene, which condition has been induced by injudicious and forcible efforts to reduce the hernial tumor.

According to my observation in such cases, the omentum is the part found in the worst condition, probably because it has been more directly the object of the force employed. It is usually in a state of semi-disorganization, and a quantity of bloody fluid is contained with it in the sac. This condition of the omentum whether recently extruded, or for some time in the sac, most usually results in gangrene. Under these circumstances, I think the advice of Bransby Cooper, to leave the mass in the sac after returning the intestine, is decidedly the most judicious practice. For if we cut it away and attempt to force a line of demarcation, between the sound and injured parts, we shall in all probability fail, and by returning the stump into the abdomen, will most likely reduce with it some portion so injured that it will eventually become gangrenous, and bring on the legitimate result of such a proceeding. If left in the sac after the stricture is relieved, it forms its own line of demarcation and the dead part sloughs away. The wound should be kept open, and partly filled with charpie or lint which has been dipped in some anti-septic and disinfecting lotion, the best of which is a weak solution of carbolic acid. The length of time required for the wound to heal, will be amply compensated by the patient's comparative freedom from danger, and

his satisfactory condition when the cure is effected. I have met with five cases of this class, and treated them as above recited; all resulted in a radical cure of the hernia.

Another and somewhat common condition in the omentum is found in the following. It occurs in old cases where the descent of the hernia has been frequent, and been often reduced, probably most often by the patient himself. A truss has been rarely worn, and when used not at all adapted to the case. The muscles and ligaments about the abdominal ring gradually lose their normal tone and tension, and the ring itself becomes largely dilated. A portion of the omentum remains permanently in the hernial sac, but slight pressure being made upon it at the ring in consequence of the relaxed condition of its parts, the circulation of the blood through the omēntal vessels is not greatly obstructed. Still the pressure at the ring has caused sufficient blood stasis in the extruded part to produce a hypertrophied condition of the lower border. The part near the ring and within it is found with less deviation from its normal structure. The omēntal mass within the ring is much larger than that contained in the sac, filling the ring very completely. The descent of a portion of intestine and neglect to return it at once, results in strangulation, and on opening the sac and relieving the stricture, and reducing the intestine, the question arises, what shall be done with the omentum? A portion has become hypertrophied, perhaps indurated, and the greatest and most recent authorities say, cut it away.

The first time I met with this state of things was many years ago (1854), when I could not look back on an extensive experience in Herniotomy. I followed the rule of practice in the "books," and cut away the hypertrophied portion, carefully securing the vessels with fine silk ligatures. I tied eighteen bleeding vessels in the stump. I placed the end of the stump in the ring, bringing all the ligatures out at the upper angle of the wound and secured them to the patient's abdomen with adhesive plaster. On the second day a violent peritonitis set in, and after the most vigorous treatment for many days of anxious solicitude, I had the good fortune to see my patient slowly recover from his malady and its effects. The fears of some of the older authors that such a proceeding as I had adopted in this case, would be likely to bring on peritonitis, I fully realized. The result of the practice was not such as to give me the greatest confidence in it. Two years subsequently, I met with a case in which the condition of the omentum



very closely resembled that just described. The lower border was thickened and somewhat hardened in texture, presenting to the touch a somewhat lumpy feel; the hardness or induration did not, however, present the waxy solidity before mentioned.

After dividing the stricture and replacing the intestine, I gently and without difficulty returned the whole into the abdomen. In the light of authorities this was a hazardous act, and I anxiously awaited the result. On the second day some abdominal tenderness was observed, which was relieved in a few hours by a full dose of morphia and the external application of warm turpentine stupes. The patient made a good recovery and is living yet. I see him almost every week, and often hear him say that he is a "better man" than he was before the operation, a radical cure of his hernia having followed.

Since then I have, on three occasions, met with a similar condition of the omentum, and have treated it in the same manner. No unpleasant results followed in either case, all of the patients making a good and prompt recovery, and there were no subsequent bad symptoms.

My reasons for turning aside from the beaten track of practice, and pursuing a course against which we have so often been warned by authors, are as follows: The case I have detailed in which I followed the teachings of most authors, was a fearful one to me. It was the most violent case of peritonitis that I have ever seen follow herniotomy, and carried my patient to the very verge of the grave. I do not know whether it was caused by inter-abdominal hemorrhage, or other causes, but I can not forget the bitter gnawings of anxiety which I suffered while attending the case. As to inter-abdominal hemorrhage having been the cause, I can only say that I carefully secured every vessel I could find in the stump, and in other respects implicitly followed the rules given by Cooper, Lawrence, Ericksen, Dieffenbach, and others. After such a result as I had in that case I had no desire to repeat the operation. Again, after examining as well as I was able, the condition of the omentum found in hernial sacs, and described as hypertrophied and indurated, I failed to detect by the microscope or otherwise, any evidence of diseased action, or tissue degeneration in it. True, its natural appearance is altered and it is hypertrophied, and perhaps indurated, but hypertrophy is *not disease*. It has been defined to be over-growth without change of tissue. Induration within certain limits is but an excessive hypertrophy, still



without tissue degeneration. This hypertrophy is undoubtedly produced by a partial blood stasis, caused by the pressure of the abdominal ring on the portion of omentum contained within it. It differs in nothing from the hypertrophy of other parts or tissues produced by the same cause. Of the same class and nearly allied to it, is the hypertrophy of the areolar tissue of the leg, caused by varicose veins. The coats of the blood vessels of the leg lose their natural tone and elasticity, generally from some obstruction to the normal circulation of blood through them. A partial blood stasis is the result, and the vessels being engorged with their contents, become larger and longer, and present the tortuous conformation which they exhibit. The sluggishness of the circulation gives rise to this excess of nutrition or hypertrophy of the part supplied by such vessels. We relieve this condition by pressure to sustain the weakened vessels, and quicken the current of blood through them, and in course of time the hypertrophy is removed by absorption, hastened perhaps by the pressure employed for another purpose. In herniotomy we relieve the stricture which caused the hypertrophy or induration, and place the part within the abdomen to resume its normal function, and as I believe (though I have not yet verified it by an autopsy), the over-growth is removed by absorption, and the part is restored to its normal reticulated structure.

Another objection to the reposition of hypertrophied and indurated omentum within the abdomen is, that its presence there may or would be likely to excite peritonitis. But the mass has been in contact with the peritoneum all the time it was in the hernial sac, and has been productive of so little inflammation, that commonly no adhesion has taken place between the parts, for the hernial sac is nothing more nor less than a portion of peritoneum, forced out through the abdominal ring. If then the omentum has been innocuous to produce inflammation while in contact with that portion of peritoneum which forms the hernial sac, why should we fear such a result when it is brought into contact with the same tissue within the abdomen?

In this variety of omented hernia which I have attempted to describe, I have so far met with no firm adhesions to the sac. In one congenital case the patient being aged about forty, I found the lower border of the hypertrophied omentum somewhat firmly adhered to an atrophied testicle; I broke up the adhesion, touched the raw surface, which was about half an inch long and very thin,

with a solution of ferri-perchlor., then washed away the solution and returned the part; no unpleasant symptoms followed the proceedings.

If then, the opinions and practice which I have detailed be correct, we have fairly deducible therefrom the three following rules:

1. When the hernial omentum is degenerated in structure, and pediculated in shape, which conformation perhaps always exists in connection with degeneracy of tissue, or firm adhesions to the sac, we should enclose the pedicle of the mass in a strong ligature, and cut it away below.

2. When the hernial omentum is much inflamed, or contused, or in a state approaching gangrene, as often happens from the application of undue force in attempts to reduce by taxis, the part should be left in the sac.

3. When the abdominal ring is much distended, and a large mass of omentum is found within it and the sac, and if the omentum be either in part, or in whole hypertrophied, or indurated, without tissue degeneration, we may safely return the whole into the abdomen.

As to the disposition of recently extruded omentum, when it has not been contused by rough manipulation, no doubt can exist of the propriety of returning it at once. Anomalous cases will no doubt occur, for which no rule can be given, the disposition of which must be left to the judgment and discretion of the surgeon. But I believe it would be rare to meet with a case which can not be classed with one of the three conditions I have described. In the thirty-six cases in which I have operated no such anomaly occurred.

I am not so unwise as to think that any rule or law in medicine or surgery, can be established from the limited number of cases that I have witnessed. But I believe, so far as I have observed, I have drawn rational conclusions, and now publish my experience and opinions to see if the practice of others will corroborate them, provided any should have sufficient temerity to violate a given rule of the "books." Certainly the fears of the older authors of the effect of replacing hypertrophied and indurated omentum, were not realized in my cases, and I am forced to the conclusion, that the evil consequences which they have related as following such a practice, were rather due to the drastic purgation which was practiced immediately after herniotomy, that having been the rule of practice in the days of Pott, Hey, Sir A. Cooper, and Lawrence, and which is yet said to prevail in continental Europe.

*Art. II.—Cases from my Note Book.*

By T. W. McARTHUR, M. D., Chillicothe, Missouri.

CASE I.—Mary Whorton, age 4 years, in the act of laughing, drew a grain of corn into the trachea, on the 15th day of March, 1868. Thirty-four (34) hours after I opened the trachea, and removed the grain of corn. The little sufferer recovered rapidly, notwithstanding the long suffering and *emaciation*. There was scarcely a drop of blood entered the trachea. I used the handle of scalpel and finger nail principally, in going down to the rings of trachea.

CASE II.—Mrs. McBride, age 36 years; in her sixth confinement. I was requested by Dr. T. M. May, of this city, September 29, 1866, to see this lady. I found the cord prolapsed, and the right shoulder presenting in the first position. After obtaining consent of Dr. May, patient under chloroform, I induced cephalic version, with little difficulty. Child had been dead for 12 hours.

September 30, 1867. I was sent for by Dr. May to see this lady in labor, and found the right shoulder presenting in first position. While under chloroform made an effort to induce cephalic version, and failed. I now think I did not *persevere*, or I might have brought the head down. The child was delivered by the podalic version. Child dead several hours before delivery. Mother did well. [In both these cases, the children being dead, what was the advantage of cephalic or podalic version. Ed. L. & O.]

December, 1868. Dr. May was called to this lady in labor, and found the head presenting with *prolapsed cord*. Child dead; mother did well.

CASE III.—Ernest Seamen, age 10 years; "*sucked*" a medium sized pin from an "air gun," into the trachea. To the head of the pin was attached, in successive folds, the ordinary red *floss*, to complete the idea of a "*wad*." The little boy, not succeeding very well in the way of "*blowing*," concluded to try the experiment of "*sucking*," which resulted in placing the *wad* in his wind-pipe. Twelve hours after the accident, there being great danger of suffocation, in consultation with Drs. May and Dockery, of this place, we determined to open the trachea. The patient under

chloroform; the wind-pipe was opened, and with the *ordinary sized* forcep (tracheotomy) I succeeded in seizing the foreign body, which was in lower end of trachea, but was compelled to abandon the hold on the pin, for the *want of time* to "manœuver it out." The *failure*, in my opinion, was mostly due to the *size of the forcep*. After abandoning my hold on the pin, notwithstanding several trials, I was never able afterward to *find* the foreign body.

I saw, a short time since, a rudely constructed forcep in the drawer of that venerable man and accomplished surgeon, Paul F. Eve, of St. Louis, Mo., with which I think I could have succeeded in this case. The wound was kept open for several weeks, with the hope the pin might be found and removed. The boy made a good recovery, notwithstanding the great amount of *suppuration*. The only evidence of disease or trouble in lung at present is, *dullness* at the upper part of right lung, with imperfect *respiratory murmur*.

CASE IV.—Henry Davis, age 5 years. "Had been afflicted from his birth with disease of the bladder." He first came under my care three weeks before the operation. Sounding the bladder, found stone.

On the 8th of December, 1869, in the presence of Drs. Dockery, Kay, May, Poindexter, and Beeman, the boy being under the influence of chloroform, I removed a large amount of stone, by the *bilateral method*. There were three distinct stones, the largest the size of an ordinary walnut. This one was, I think, *entirely encysted*. With some *difficulty* and *delay*, I succeeded in rupturing the cyst and raising the stone from its bed, with the finger. By the 6th day the urine passed by the urethra; by the 14th day the wound in perinæum was closed. The result is a good one, except some difficulty in retaining his urine. Seven months before the operation, the urine of this child *passed involuntarily* during *day* and *night*. He is improving daily, and I hope the whole difficulty will be remedied. The amount of stone weighed over 5 drachms.



*Art. III.—Etiology of Epidemic and Contagious Diseases.*

By W. P. THORNTON, M. D., Cincinnati, O.

Nothing in this world comes by chance or accident, or by the anger of the gods as a punishment for the sins of mankind.

This was once a sufficient explanation for all the pestilence, disasters and misfortunes which overtook the human family. But we *now* know that every effect must have a cause, and that without a sufficient cause nothing can take place. None of the great epidemics and plagues that have swept from the face of the earth so many millions of our race have originated spontaneously of their own accord, or by the will of Heaven, but are the results of pre-existing causes, which like all of Nature's works, are regulated by fixed and unchangeable law.

Some of the greatest triumphs of our science consist in having discovered and obviated the causes of disease.

The study of etiology, at the same time, that it is one of the most humane and philanthropic, is one of the most interesting branches of the medical profession.

Geology teaches us that nearly all limestone rocks, as well as marble, all chalk beds and very extensive deposits of green sand, and as well as our extensive coal fields, are but the debris of a former and vegetable life. Many of these were simple in structure and only microscopic in proportion. It is highly probable that no small portion of life first made its appearance on our globe in the form of unicellular plants and animals, and that the history of their life was but the history of a single cell. We are told that myriads of these insignificant creatures, invisible to the naked eye, are now at work building up a new continent in the great Pacific ocean, which may one day be the happy abode of man, or perhaps some order of beings still more elevated, more God-like than he. The chalk with which we draw upon the blackboard is to a great extent made up of the shells of Protozoa, invisible to the eye of man, and Diatoms, of vegetable growth, have formed considerable strata of flint and sandstone rocks. Mr. Bailey, of the United States Coast Survey, has found these animalcules still at work at the bottom of the Gulf of Mexico. Indeed, no small part of the solid crust of our globe has been formed by microscopic vegetable and animal life. Many of them are not only very

diminutive in proportions, but so very simple in structure as to consist of only a cell-wall and cell contents, without organs of prehension, digestion or circulation. These creatures are to be found everywhere around us. They float in the atmosphere that we breathe, in the fluids that we drink, and are mingled with the food that we eat; only waiting for a suitable soil in which to grow, develop themselves, and fulfill the second law of organic existence, viz: the multiplication of their species.

Some of these cellular beings can only find the proper nidus for their multiplication within the bodies of other organizations. Indeed, the whole animal race may be said to be parasites, for they can only live by the destruction of the products of other organized beings.

It is now well known that the potato rot, vine disease, and the rust of wheat, are dependent on a vegetable parasite growth, which often comes in the course of a single night, fastens on the young and growing plant, and chokes out its life by cutting off its supply of nutritious juices. Vegetable parasitic growths, actually growing from the bodies of the silkworm, are annually the source of heavy losses to the Italian silk-grower. Nor is man, the highest of all animal existence, without his parasites, only waiting for a favorable opportunity to fatten and riot upon the succulent juices of his body. I think I shall be able to show that no inconsiderable share of his ills in this life are dependent on the growth and multiplication of foreign cell-life, either on the surface or in the interior of his body. It is now a well-established fact that the acari and many other insects, on the surface or burrowed beneath the epidermis, produce a form of eczema, vulgarly called itch; that vegetable growths in the hair follicles and on the surface of the skin are the cause of favus, herpes tonsurans, pityriasis versicolor, sycosis, and eczema marginatum; that the eggs of the trichina spiralis, echinococcus and intestinal worms enter the body with our food and drink, grow, multiply and increase, producing serious, and often fatal, disease. Now, inasmuch as there are myriads of the spores of these creatures everywhere around us, many thousands of which are contained in the 350 cubic feet of atmospheric air that every man must inhale in twenty-four hours, how many may enter his circulation through the lungs! And if they there find the conditions suitable to their multiplication and development, is it not almost positively certain that they would produce a set of phenomena which we designate as disease?

What, let me ask, is the poison of variola, vaccina, syphilis, hydrophobia, the bite of poisonous serpents and insects, as well as many other noxious agents, but an albuminous fluid containing poisonous cells, which, when introduced into the circulation of the healthy human body, have the power of cell multiplication, and of producing a series of phenomena similar to that of the individual from whom the poison emanated. What does the physician do when he performs the trifling operation of vaccination? He merely transplants on the point of his lancet a little lymph, containing a number of small, invisible cells, from the diseased, and engrafts them upon the healthy body. These cells there find a soil adapted to their ephemeral existence and multiplication, and during this period of time they produce such disturbance of the circulation and nervous system as to constitute disease. What occurs when an unfortunate man contracts syphilis? The morbid cells from the diseased are introduced under the epidermis or the epithelium, enter the circulation of the healthy, and there finding the means of growth, contaminate the blood and secretions of the individual, who again in turn becomes a source of disease to others. It poisons every particle of his body and secretions; even his spermatozoa may become carriers of the morbid matter to his offspring without infecting the body of the other parent, in which it has a temporary existence of nine months.

Physiology teaches us that every adult human body exhales, in the course of twenty-four hours, a volume of air equal to that inspired, with a diminution of oxygen, an increase of carbonic acid, charged with moisture and cells, imparting to the exhalations a strong animal odor. Also, that a considerable amount of fluid containing cells escapes from the skin and other excretions.

Now, in case of certain diseases called infectious or contagious, these minute cells or spores float in the atmosphere of the diseased body, producing a locally-poisoned condition of air which it is highly dangerous to breathe.

Why, let me inquire, is it unsafe to inhale this contaminated air? Is it not plainly because it contains something deleterious which has escaped from the diseased body, and which has the power of producing a similar disease in others? It can not be any odoriferous principle which produces its effects by coming in contact with the distributions of the olfactory nerve. Is it not much more probable that some exceedingly volatile and fleeting particles, escaping from the diseased, has entered the healthy cir-



culatation through the medium of the inhaled air, where it finds suitable conditions for cell multiplication, producing a similar disease to that of the individual from whom the poison emanated?

But, let us ask, what is a cell, which, according to this theory, plays so great a *role* in the production of epidemic, contagious and infectious diseases? It is a microscopical body, consisting of an albuminous cell wall, containing a nucleus, and sometimes a nucleolus, with an albumenoid and saline fluid. It has the power, by a process called proliferation, of producing other cells. No cell can originate spontaneously, but must have a parent cell as its origin. All organized bodies, whether animal or vegetable, are but an aggregation of cells, and their life is but the sum of their cell life. A cell is to an organized body what an ultimate chemical element is to a crystal; it is an ultimate anatomical element; and from these cells are formed all plants and animals. They are higher and more complex, at the same time more evanescent and fleeting compounds, than a rock or a crystal—more prone to undergo decomposition, or to enter into new combinations. The power of multiplication in a cell may be permanently destroyed by exposure to either extremes of temperature; though in this respect there is a great difference in different species of cells. Clothing from diseased bodies exposed to a high degree of temperature are effectually prevented from carrying the contagion to others.

The so-called period of incubation, common to most contagious diseases, is but the period required for a sufficient cell-growth, after its implantation in the new soil, to produce disease. Therapeutical experience also confirms this theory. No intelligent practitioner at the present day believes it is in the power of man to cut short scarlatina, small-pox, measles, typhoid fever or Asiatic cholera. All we expect to accomplish is, by judicious hygienical and therapeutical means, to obviate those *secondary* local affections, which may prove fatal to the lives of our patients; but over the essential process itself we have little control. The morbid process is self-limited, and will run its course.

I therefore conclude that all epidemic, contagious and infectious diseases are propagated by cellular implantation into the circulation or on the surface of the human body, where, after a period of time requisite for multiplication and growth, they produce disease.

This is different from the so-called animalcular theory, inasmuch



as that only *a cell*, be that animal or vegetable, is necessary to produce the morbid process which we call disease.

Frey, in his *Histology*, says cells possess the power of absorbing foreign material, of modifying the same, and emitting it after such change; that they also possess the power of growth and multiplication, of uniting with each other, and of vital motion.

The most complex organizations, even the body of man himself, once consisted of *a cell*, and his whole future life, with all his great aspirations and achievements, were bound up in that single cell wall. But that cell was possessed of the power of life and growth, and the life of that man to-day is but the sum of his cell life.

WM. P. THORNTON.

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***Art. IV.--Case of Severe Injury of the Neck. Recovery with Loss of Use of the Left Shoulder-joint.***

By DR. J. T. DAVIS, Laconia, Indiana.

August 1, 1868—I was sent for to-day to see Edward C., æt. 10 years, severely injured by the tooth of a hay rake; on arrival, I found that Dr. Henry Pusey, of Garnettsville, Ky., had also been sent for; we proceeded at once to examine our patient, and learn the extent of his injuries. He had bled profusely, and was greatly prostrated from the loss of blood and the shock. His injuries proved to be severe, although not so much so as we at first apprehended; there were wounds and contusions as follows: First. A wound two inches long and two deep, two inches below and an inch back of the left ear. Second. A wound under the chin, completely severing the muscles, and laying the larynx bare. The wound was four inches in length, and on the right side nearly an inch deep. Third. A wound over the symphysis of the lower jaw-bone; this was an inch and a half long, and reached to the bone. There were also contusions at the top of the sternum and on the left shoulder, but no dislocation or fracture. Prognosis unfavorable; we fear paralysis of œsophagus and trachea.

Treatment: cold water dressings to wounds; an opiate to secure rest; ordered the room to be kept quiet, and the patient watched

continuously, and in case there were much difficulty of breathing, to have the patient to inhale the steam from a teapot. This was found necessary, and was resorted to several times with decided benefit; fever was very high for two days, the neck very badly swollen, dyspnœa very severe, and deglutition extremely difficult. These threatening symptoms, however, were removed in a short time by the constant application of cold cloths to the neck, and the inhalation of steam. He now began to improve, was ordered a good, nourishing diet, and the following R., quinia sulphas, gr. xx; tr. ferri. chloridi, ʒij; spts. frumenti, ʒiv; M. half a tablespoonful in sweetened water every two hours; wounds dressed as before; he improved finely, wounds healing nicely.

August 10, there are some large, fungous growths, requiring to be cut off with the scissors, and touched with a pencil of silver; after these were removed, the wounds healed without further attention, except the application of the ceratum simplex, as an emollient. He continued to complain some of a numbness in his left shoulder, the joint was again examined, but it proved to be in proper position; motion was good, but the power to use it seemed to be lost. From this date up to the 1st of September, he continued to improve; he was then removed to his home, a distance of ten miles, and I then lost sight of him. Fourteen months after this I saw him again. His head was drawn to one side, and the head of the humerus had dropped out of the glenoid cavity; it had been replaced several times but would not remain in position. The shoulder was considerably atrophied, there was still some use of the hand, but the whole arm was considerably smaller than its fellow.

As stated above, there was no dislocation that could be discovered at the time the injury was received, neither was there any when the patient was removed to his home a month later. Now, in what way are we to account for this condition of the shoulder joint? I know of no way except it be that the injury of the nerves caused a failure of nerve supply to the muscles of the joint. This deficiency of nerve force, undoubtedly caused the numbness which he at first complained of, and which afterward resulted in the loss of muscular power to use that joint. I have requested the opinion of some of my professional friends in this case, and their opinions coincide with my own. Thinking the case may be of interest to your readers, I lay it before them with your consent.

*Art. V.--Address to the Graduating Class of Miami Medical College, February 28, 1870.*

By PROF. W. H. TAYLOR.

Published by request of the Class.

Occasions such as the present naturally bring with them mingled feelings of regret and pleasure.

The intimate association of student and teacher, and the close fellowship of classmates are not terminated without regret.

Thus far through life, many of you have been under the guidance of parents or preceptors, sheltered, as it were, from rude contact with the world, with some one to direct your course and to lighten the responsibilities you may have had to bear, but to-morrow you go forth into the conflict of life, taking your place in the ranks, and asserting your willingness to bear the burden, and to rise by your own might, or to fall if it must be, with none to uphold.

It is not strange that you should hesitate, and even feel a secret longing to return to the quiet walks of student life.

On the other hand, as you review the years of toil which end to-night, and recall the doubts and fears which have assailed you, and which this occasion proves were groundless, how your hearts thrill with pleasure at the thought that *these* are passed forever, and as you picture to yourselves in glowing colors the success which you feel awaits your future labor, well may you exult in the thought that you are now ready to enter on the solution of life's problem.

Let me assure you on behalf of the Faculty whom I represent, that we cordially respond to your every wish for prosperity, and pray that your course in life may be one of uninterrupted usefulness and unalloyed pleasure.

Opportunities such as the present are frequently used to depict to those just entering on their career, the lights and shadows of professional life, or to recount the reciprocal duties of physician and patient, but presuming that in making choice of our profession, as your life-work, you have duly considered it in all its aspects, and consequently in some degree, at least, are aware of the pleasures and tribulations associated with it, and, believing that you recognize the responsibilities you are about to assume, and are imbued with the

spirit of true courtesy, I consider it needless to present the one or to impress upon you the other of these topics.

But there is a position which you are about to assume, which I think has not been sufficiently appreciated either by the professional or popular mind, I refer to your relation to the *community*.

It is with a feeling of pride that I assert that the members of our profession have ever been among the first to give the alarm when evil has threatened the moral or physical welfare of their fellow-men, and always have been foremost in the conflict when the danger has come, but that he is to act as a conservator of health, has not been adequately impressed on the physician's mind.

If it is a source of pleasure to alleviate suffering, how much more should we rejoice to avert it! if it is meritorious to rescue a life from the grasp of the destroyer, how much more noble to prevent that life from being jeopardized. To regard the prevention of disease as a part of our duty, elevates our life-work and brings it one step nearer to the Divine mission, and such is the future of our profession to be.

The great characteristics of the present day are activity and progress.

Not content with achievements which even our fathers believed impossible, and with expedients by which we now live as much in a single year as our ancestors did in a life-time, we still push onward, striving for more. Glorious as is such progress, and happy as we should be that we live in such a day, yet our advance is not unalloyed good.

As in mechanics it is a law that increase of speed compels increased expenditure of force, so the march of civilization demands sacrifice of human force unknown in other days, but we believe the simile can not be maintained throughout, for while it is an unalterable law of mechanics, we do not think it inevitable that social progress should be attended by such destruction of human life.

To solve the question how to secure the good and avert the ill is the problem presented to the medical man in his relation to the community.

Of the magnitude of the problem, let a quotation from a recent report of the Board of Health of New York show:

\*"The heart-stricken sorrow of those who mourn the untimely

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\* Report Metropolitan Board of Health, 1866.



death, the anguish of the sick and dying are never out of mind, while the burial clerks in New York and Brooklyn *daily* note from 25 to 30 *preventable and needless* deaths in the two cities, but who shall estimate the amount and value of wasted health and the cost of sickness that should be prevented in this population? To save such waste and such needless suffering would be a greater benefit to the people and the state than to increase their wealth a hundred fold."

Of the value of the science which seeks to eradicate such evil it has recently been said:

\* "In the great objects which it proposes to itself, in the immense amelioration which it proffers to the physical, social, and indirectly to the moral condition of a vast majority of our fellow-beings, it transcends the importance of all other sciences, and in its beneficent operations seems to embody the spirit and to fulfill the intentions of practical christianity."

The practicability of such efforts, and the abundant fruit borne by such labor, can be shown by a single example:

In the city of Liverpool, in the year 1846, 384 deaths occurred in every 10,000 inhabitants. In the ensuing ten years sanitary reform was vigorously promoted, and as its result we find the mortality reduced to 299 per 10,000; now, as statistics show an average of 28 cases of sickness to each death, we have the magnificent result of 3,750 lives saved, and *one hundred and five thousand* cases of sickness prevented in a single year.

Can the importance of such labor find any expression in pecuniary value?

Admitting then the importance of this subject, let me ask your attention to some of the causes of disease and death which, as preventable, demand the consideration of the hygeist.

*Pauperism* is an evil of modern civilization; that this fact evidences an increased regard for life is matter for congratulation, but, on the other hand, in that it increases mortality it is equally to be deprecated. The constant increase of manufactures and mechanical avocations in our large cities necessarily attracts labor to them, and with such aggregation comes enhanced value of the necessities of life, without always corresponding advance in compensation for labor.

Again, the increase of competitors limits the wages received; to

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\* Quoted in Report Metropolitan Board of Health, 1866.

these must be added the vicissitudes of trade and the frequent periods of idleness consequent thereon. These all conspire to limit pecuniary resources, until we find a great proportion of our large communities depending for their daily food upon their daily labor, and if the latter ceases the former fails inevitably.

But a greater evil than deprivation of bread (because that can always be mitigated), is that such poor are forced to take the cheapest possible habitations. What such habitations are, none know better than the physician whose duty takes him wherever human suffering exists. In low-roofed attics, in cellars dark and damp, in rooms small and ill-ventilated, all slimy with filth, and reeking with odors intolerable to all but the occupants, dwell, or at least exist countless numbers of our fellow men. I do not exaggerate when I say that in our city are hundreds of human habitations into which the sunlight never enters and through which no refreshing current of pure air ever passes.

Now, in these associated conditions we have influences most potent in the development of disease.

Says a zealous friend of the laboring classes, who has thoroughly investigated these subjects: \* "Thousands of deaths annually occur from such diseases as are in the most absolute sense *preventable*, diseases which either will not arise, or will not spread in communities which follow certain well known sanitary laws. For \* \* \* there are certain diseases of which it is hardly a metaphor to say that they consist in an extension of a putrefactive process from matters outside the body to matters inside the body, diseases of which the very essence is filth, diseases against which there may be found a complete security in the cultivation of public and private cleanliness," and thus a large proportion of human life is sacrificed to preventable disease lurking and fostering in the unwholesome tenement houses too often inflicted on the poor by wealthy but heartless proprietors; a striking example of the truth of this proposition is presented in the fact, that in the city of Liverpool  $\frac{1}{20}$ ths of the cases of continued fever occur among the lower classes of inhabitants, and equally convincing are the figures which show that the average duration of life among the higher classes is 52 years, whilst among the indigent it is but 32.

The knowledge of causes of the evil suggest at once the remedy, but how to effect the requisite changes in habits and habitations is

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\* Town Swamps and Social Bridges.—Geo. Goodwin.

far from being solved. Miss Burdett Coutts, George Peabody, and A. T. Stewart deserve unlimited praises for their efforts to improve the lodgings of the poor, but such attempts must necessarily reach but an inconsiderable portion of those they aim to benefit.

It seems only reasonable that the *state* should take cognizance of a source of such evil to its constituents, and by the strong arm of the law exercise jurisdiction over the construction of dwellings with reference to ventilation, light, and facilities for cleanliness. Dr. Clendenin has been so convinced of the propriety of this course as to prepare an appropriate bill for the consideration of the Ohio Legislature, but as yet it has received no recognition by that body.

The attention of the physician, the humanitarian, and the economist has of late been strongly directed to the fearful *mortality of children*.

In this age when decimating pestilence and grim-visaged war are not regarded as providential means for removing surplus population, and when J. Stuart Mill's doctrine, that fruitfulness in the poor is criminal, does not meet with general approbation, the fact that about 50 per cent. of the human race have completed their career on earth before their fifth birthday, very naturally excites the deep solicitude of all who are interested in the welfare of the community.

In the facts already presented we find one prominent cause of the death of infants, but the excessive proportion of children's deaths forces us to seek some further explanation.

In attempting the solution of this question let me for a moment limit your attention to the earliest periods of life.

It is a well established fact that under ordinary contingencies a certain number of children are dead at birth; from very extended observation this number is found to be about  $3\frac{1}{2}$  per cent., but statistics teach undeniably that of recent years *asserted* cases of this kind are far more numerous, averaging about 10 per cent. In addition to these, a large number of children die within a few weeks or months after birth.

Now, I desire to make no "sensational" statements, but judicial inquiry, and the observations of unprejudiced men compel the belief that many of these children perish by the murderer's hand.

The Registrar General's report of deaths in England and Wales, for eighteen months, shows that the bodies of 5,546 children under two years of age had been made the subject of official investigation



as to the cause of death. Conclusive evidence of murder was produced in about  $\frac{1}{5}$ , and all but positive evidence was found in nearly  $\frac{1}{2}$ . But the horror does not cease here, in one year 3,000 children were burned to death under circumstances that led to the belief that they had been designedly placed where there would be a liability to such an occurrence; to these must be added those cases where by carefully systematized cruelty or more caution life is gradually destroyed, and the charge of murder is escaped by the return of death from debility, marasmus, etc.; or, where the not unfrequent *accident* of being smothered in bed occurs. This latter method of disposing of children is so common that in some countries it is now a penal offense for a mother to allow an infant to occupy the same bed with herself. But you say I am citing foreign statistics, but I do not grant the inference you would draw—that we are without sin. Less than a month has passed since a case admitting of strong suspicion, at least, came under my observation, and it is not the first in my experience, and I doubt not the majority of physicians of the city would concur with me as to the existence of this evil.

Associated with this subject is the consideration of that vice which has of late been brought so prominently before the public, the destruction of *unborn* children; a crime against *all* law, physical, statute, and divine; an offense without a pretext of palliation. From the nature of the evil it is impossible to know its extent. Yet allowing that its frequency has been exaggerated, all physicians are convinced that it is an alarmingly frequent crime, and one that is increasing. With what a holy horror all refined minds will turn from such a sickening picture of human depravity. But let us look at the children of the better classes, and see what dire influence sweeps them away.

Abundant observation shows us that Death comes to them in a more elegant guise, and with all due and proper regard for law.

On this point I can not do better than quote from a recent article of my colleague, Prof. Clendenin: \**“Another chief cause of the waste of infant life, especially among those we are wont to designate the upper class, is the neglect of maternal duties by fashionable mothers. Fashionable society is now so constituted that it is considered a mark of a woman’s refinement and social standing to abdicate the first and most important of woman’s duties, the*

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\*Our Monthly, March, 1870.



maternal function," and another eminent sanitarian says, \**"The chief cause of infant mortality is not more the weather or foul air than the ignorance and false pride of mothers. Children are killed by the manner in which they are dressed and the food that is given as much as by any other causes. Children are left with bare arms and legs, and with low-neck dresses. The mothers in the same dress would shiver and suffer with cold, and expect a fit of sickness as a result of their culpable carelessness."*

Should the child pass safely through the ordeal of early life, an evil perhaps less serious in its effects on the individual but not less injurious to the community, awaits those who enter the second decade.

Very justly may we boast of our system of education, so beneficent that none are denied its advantages, and appreciating it as I do, I am loath to speak of it save in commendation, but worthy of praise as it is, in conception, its practice is attended by constantly increasing evil.

I only assert a self-evident proposition when I say, that there is great diversity of mental capacity, and difference of taste in children of the same age. It is therefore absurd to demand of all children the same amount of mental labor and an equal degree of proficiency in study, or, if, as maintained by educators it is essential to have an uniform standard, it is manifest injustice to adapt that standard to the few ablest minds, and to compel the majority to attain to it by undue mental effort. Again, the curriculum of study seems to have been formed with little if any recognition of the fact that just at the time such great demands are made upon the mental ability, the physical powers are subjected to their greatest strain in the development of the body, and its most important functions.

That undue intellectual effort is injurious is well known, but all do not recognize the fact that these evils are not transient, nor limited to the individual; mental and physical development beyond a certain degree are antagonistic. Now, if the mind is overwrought, the body must fail to receive due nutrition, and impaired vitality is the result, nothing marked perhaps in most cases, till an unusual demand is made upon the physical powers, and then the defective fabric yields.

In such history as this we find one explanation of the all-

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\*Dr. Edwin M. Snow.

abounding "nervousness" of the present day, and the fragility of women.

Herbert Spencer has well expressed our errors respecting the management of children :

\*" Our general conclusion is, then, that the ordinary treatment of children is in various ways seriously prejudicial. It errs in deficient feeding, in deficient clothing, deficient exercise, \* \* and in excessive mental application.

Considering the regime as a whole, its tendency is too exacting, it asks too much, and gives too little. In the extent to which it taxes the vital energies it makes the juvenile life much more like the adult life than it should be. It overlooks the truth that as in the fœtus, the entire vitality is expanded in the direction of growth, as in the infant, the expenditure of vitality in growth is so great as to leave extremely little, for either physical or mental action, so throughout childhood and youth growth is the dominant requirement to which all others must be subordinate, a requirement which dictates the giving of much and the taking of little, a requirement which, therefore restricts the exertion of body and mind to a degree proportionate to the rapidity of growth, a requirement which permits the mental and physical activities to increase only as fast as the rate of growth diminishes."

But the catalogue of ills is not yet complete; leaving childhood, let us glance at the evils which attend maturer years.

On all classes of society the pressure of modern business life is manifest, look where you will, and the haggard face and the weary frame tell of toiling for the goods of this life.

Among the poor the struggle for bread grows sharper, and among the rich the constantly increasing competition demands more zeal and energy for increasing, or retaining that already acquired, and if we dare take, what for euphony we call recreation, it is done in such a manner as to be hard work. All we do partakes of the character of labor, every thing now-a-days must be fast or it is a failure. There is no ease, no quiet, no rest in modern life.

You scarcely need be told that a fearful destruction of health and even life must be the penalty for such living.

Granting that the asserted increase of insanity is not true, yet the overtaxed mind, the increase of nervous diseases, and the pre-

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\*On Education.

mature old age in our communities, tell unmistakably the results. To what else are we to attribute the untimely death of such men as Hugh Miller, Admiral Fitzroy, and our own great war minister?

But not alone in the higher ranks of life are the effects of modern life felt. Under the influence of increasing commercial pressure, our artisans are forced to labor under circumstances most detrimental to health.

The substitution of machinery for manual labor has wrought most beneficial changes in many cases, but in the reduction of wages resulting from increased facility of manufacture we find a source of poverty, and consequent physical deterioration. Time would fail me to tell of the price of blood we pay for articles of daily use, how in workshop and hovel, by day and by night, thousands of human beings are dying that they may live.

But to another evil.

Strong as are the arguments, moral, social and pecuniary, to be adduced against intemperance, this is scarcely the place to present them, but regarded simply in its effect upon health, no subject is of more importance to the physician.

It is needless for me to weary you with long tables of statistics showing what vast numbers annually perish directly from the use of alcohol.

Suffice it that I give you a few facts indicating its pernicious influence.

In a recent paper\* read before the New York Medical Society, Dr. Wm. Thoms stated that one person out of one hundred and forty-five of the population of New York city suffered from the effects of intemperance, and †Neison's vital statistics show that diseases arising from other causes are rendered much more fatal by intemperate habits; thus, *from diseases of the head* among the temperate there is one death to one hundred and four cases; among the intemperate there is one death to thirty-six cases; from diseases of the digestive organs, among the temperate there is one death to one hundred and sixty cases; among the intemperate, one death to forty-two cases.

In the last annual report of Longview Asylum, Dr. O. M. Langdon shows that more than one-tenth of the cases of insanity, in that institution, are the result of this vice; and Dr. Carpenter

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\* Quoted in Phila. Med. & Surg. Rep., vol. xv.

† *Ibid.*



says, "There are, in fact, scarcely any diseases of the brain which are not so much more frequent among the habitually intemperate than among the habitually sober, as to justify us in regarding the excessive use of alcoholic liquors as among the most efficacious of the conditions of their production;" but, fearful as are these results, the effects do not cease with the influence on the drunkard himself; Dr. S. B. Howe reported to the Massachusetts Legislature, that of three hundred idiots, whose family history he had been able to trace, one hundred and forty-five had notoriously drunken parents; and may I not say worse than this, the vice itself is transmissible from parent to child.

Dr. Stephen Rogers, of New York, has recently said, "Methomania is a transmitted disease. We can no longer doubt the truth of this doctrine. It is the duty of every physician in the land to know it, to acknowledge it, and to promulgate it."

But you are weary of this chapter of sadness. Let me pass over the many minor influences which militate against life and health, for the evening would not suffice to tell of how the adulterations of our food, our railroads, the sewing-machine, and hosts of the appliances of modern civilization vitiate our happiness and impair our health. And now you ask for a remedy of these ills; for some, a knowledge of the cause suggests the remedy; for others, as is too often the case, the power to detect the evil is greater than our skill to suggest or apply the remedy. All members of the social body may contribute toward their cure, but to you as physicians, it is the duty, especially imperative, to seek to stem the current of destruction. By your precept and example, by words and by deeds to aid in all that tends to the physical, the intellectual, and the moral elevation of your fellow-man. Let it, then, be the aim of your life to acquire from all sources that knowledge and skill which shall contribute to your power to benefit humanity, and while thus laboring for others, forget not to seek for yourselves that purity of life and purpose which only the cross of Christ can give; then shall your life be a success, and your death a triumph.

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\* Psycholog. Journal, January, 1870.



## Translations.

*Gleanings in Regard to Muscular Physics.*

From Fick and Heiddenhain, "*Journal von Wissenschaften Physik.*"

By THOS. C. HENRY, M.D.

Some physiologists advert to the correlation of forces in living things, and advert to the parallel between a muscle and a steam engine. But, as yet, the true correlation of heat and mechanical force is far from being fully explained. Take, for example, two muscles; let one muscle, when it contracts, have to pull against a weight, so operating mechanically; let the other muscle have no weight to pull against, and, in contracting, the other muscle has no such weight to pull against, and in contracting produces no such mechanical effect. According to the doctrine of the correlation of forces, the heat given out in the first case ought to be less than that given out in the second, on account of the force produced by the combustion of the first muscle going out partly as mechanical force, instead of heat alone. We suppose that the same amount of contraction takes place in both, except as far as the load of one is concerned. Heiddenhain, however, has found out more heat was given out in the first case, and accounted for it, that when a muscle is put on the stretch, as in pulling against a weight, contracting to do so, all the chemical changes are augmented in proportion to the amount of strain. Recently, however, Fick devised an experiment which would seem to avoid the difficulty that had troubled Heiddenhain. He has two muscles treated in every way as Heiddenhain, except that one muscle he allows to pull up a weight by its own contraction; then lets the weight, when the contraction of the muscle has passed over, pull the muscle down again. The other muscle pulls up the same weight in the same way, but at the moment its contraction is at its maximum the weight is slipped off. This muscle, then, from its elasticity, returns to its natural length when the weight is unslipped. When it has reached this point the weight is slipped on again, and the muscle is ready for

another contraction. So that, in the first case, the muscle does no actual work at all. After the contraction the weight undoes what the contraction did. In the second case the work is done and left there; real work is done. Such being the case, the temperature of the first muscle ought to rise higher than that of the second; and when each muscle has been made to contract a good many times, the fire ought to be appreciable. Fick states that it is so. Both muscles, during contraction, are therefore subject to the same strain, so that Heiddenhain's objection is obviated.

The point to be suggested is, whether, during contraction, an increase of strain produces an increase in metamorphosis of the muscle. Are we to think the effect of the strain ceases to be felt immediately the contraction is finished, and not carried into the period of relaxation? Moreover, it is proved that, as a matter of fact, when two muscles are treated as in Fick's experiment, one strained a time and the other only during contraction, the amount of chemical changes taking place in the first, as evinced by acid, is distinctly larger than in the second. So there the point rests.

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### *Pus Formation.*

Translated from *Allgemein Pathologie*, Uhle & Wayne.

By Dr. JAS. T. WHITTAKER (by special request).

The sequence of inflammation may be observed in every variety of tissue and organ in the cadaver, as well as in the skin and external mucous membranes, particularly the cornea, during life; better, however, by experiment and examination of the parts acted upon, under the microscope, for continuous hours and days.

For this purpose the various caustics (particularly ammonia, nitrate of silver, acids, etc.), or strongly irritative substances (alcohol, tincture cantharides, vinegar), and substances of great diffusive power (salt, chlor. calcium, etc.), are applied to translucent structures of easy observation and of known structure, as the swimming bladder, cornea and mesentery of the frog and mammifera, or the wings of the bat; or the internal organs may be examined without any application, as the entrance of air is

irritant enough. Pricking with needles, cutting with threads, etc., elevation and depression of the temperature, are other means to effect the same result.

When the mesentery of a frog is placed under the microscope, there is first observed an equable *dilatation of the arteries*. In about two hours this attains its highest point, and they may have reached a size double that of their original diameter; further, a remarkable lengthening of the same. The *dilatation of the veins* occurs much more slowly; they, too, may acquire the same increase in diameter, but without any lengthening. The rapidity of the current, which, in the beginning, was constantly the same, is always lessened after a few hours, so that individual corpuscles may be recognized. Pulsation is revealed in the arteries. The current loses the axial character which it always possesses in normal conditions. The blood mass fills the entire cavity. The *peripheric zone* of the current in the veins, the original layer of plasma, fills now very gradually with *colorless blood corpuscles*. A few of these at first settle into rest; then more and more, until, after a little while, the entire inner surface of the vein appears tapestried with a simple layer of these colorless cells, while the red blood column floats on within. Again, after a time, these colorless corpuscles are seen to penetrate from the vein's interior through its intact wall. Small, colorless, button-shaped elevations on the vein's exterior gradually enlarge, still in connexion with the venous wall; then detach themselves and float off at a distance. All this time new corpuscles are supplying their places on the inside, and then in turn penetrating through. This procedure commences at times in a half an hour, at others only after several hours, being different in different veins and in different animals. It is noticed as well in those cases in which the colorless corpuscles have been impregnated with aniline blue, cinnabar, etc. Simultaneously with these occurrences in the larger vessels, the capillaries also enlarge, generally only to one-sixth or one-fourth increase. In one part the current travels on continuously with equable rapidity; in another, a perfect or partial cessation is observed, the colorless corpuscles displaying amœboid movements, and migrating in the same manner as in the veins through the vessel walls. They are seen embedded (*eingeklemmt*) in the vessel walls, now in their entirety, now but partially, so that the current continually tears off the protruding portion. Thus, after a few to twenty-four hours, the capillaries are surrounded with



numberless cells, colorless mostly, a few colored partial or entire. "The dilatation of the larger vessels depends upon a paralysis of their muscles; this may depend upon a direct cause (influence of atmosphere) or reflex (through sensitive nerve fibers). The protraction or the slowness of the current is a consequence of the enlargement of the vessel's channel. The accumulation of colorless blood corpuscles in the border zone is in consequence of the diminished rapidity of the current; this rapidity is greater in the axis of the vessel than in its periphery. The colorless corpuscles are not only moved onward in the direction of the current, but are also turned upon their axes. These two motions send them to the periphery."—*Cohnheim*.

The corpuscles escape from the vessels through the rounded or elliptical stomata of different sizes between the epithelial cells or the intima of the vessels and those of the capillary walls, from vessels larger than capillaries in the intervals of the usual intermuscular connective tissue of the vessel wall.\*

"The force with which the corpuscles escape from the vessels is different in both varieties. The colorless always maintain a spherical form so long as they continue in the direct current; so soon as they come to rest anywhere, however, amœboid motions soon commence. They thrust out their prolongations toward that portion of the vessel wall where they encounter the least resistance; that is, toward the stomata and interstices of the connective tissue. While the colorless blood corpuscles thus escape in a kind of active manner, the red corpuscles find their exit passively from the increased pressure upon stomata previously dilated by the transit of the white."—*Cohnheim*.

The migrated corpuscles remain but a little time in any proximity to the vessels, as they travel on continually, while their places are as continually supplied by others. After a few hours the mesentery is abundantly filled. The red corpuscles remain generally in close proximity to the capillaries, if they are not removed by a strong transudation (*vis a tergo*), or by other cir-

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\*Thus, according to Cohnheim, the escape of blood cells from uninjured walls is a *passive* procedure; the increased pressure from within dilating the pre-existing stomata, and forcing the corpuscles through. According to Stricker, the process is an *active* one. The capillary wall, which is a protoplasm in tubular form, capable of contraction and dilatation, takes up the corpuscles, and then expresses them through.



cumstances. At the same time the substratum of the mesentery, the epithelial nuclei, as those of the connective tissue, may be seen unchanged in form or distinctness, to the extent of their cover by the migrated cells. The migrated cells remain partly in the tissue of the mesentery, and in part upon its surface, which they attain either directly or after various movements in the tissue. Simultaneously an abundant plasma escapes from the vessels, and as soon coagulates, inclosing the migrated cells.

The same changes may be observed in the peritoneum of the frog, when an irritant is applied and the intestinal canal is drawn forth from time to time and examined under the microscope. The same process is likewise observed in the warm-blooded animals. In all probability, it may likewise be witnessed in all the other tissues, with the difference only that elsewhere the most of the corpuscles escape from the capillaries, and not from the veins, as in the mesentery, which is destitute of capillaries.

In tissues without vessels (cornea, etc.), the pus cells originate from the vessels in their vicinity.

The objection that, in large accumulations of pus, the whole quantity of pus cells could not be furnished by the white corpuscles, is answered by the fact that the quantity of the white cells present in the circulation is generally under-estimated, since a far greater number exist in the smaller veins and the capillaries than in the larger vessels and heart. Further: during an inflammatory process the spleen and lymphatic glands undergo a hyperplasm, and thus afford continually new white corpuscles. (*Cohnheim.*) Possibly, however, this increase of cells in the lymphatic structures depends upon an immigration of the same. (*Hering.*) The mode of increase of the white cells remains still in obscurity, at least in large accumulations.

According to these observations, then, the essential conditions of inflammation consist of a hyperæmia of the vessels, an exudation of serum and fibrine, and a migration of the red and, particularly, of the white blood corpuscles. These latter form, or are, the pus cells. The mistake of attributing the origin of pus cells to a proliferation of the various tissue cells, especially the connective, arose from not having "fed" the colorless corpuscles with coloring matter, so that they could be distinguished from each other. In tissues without vessels, as the cartilages, cornea and vitelline lens, there is, however, *first* observed an enlargement, cloudiness and hyperplasm of their cells, and then follows the

dilatation and distention of the nearest vessels. This theory of Cohnheim, which overthrows that of Virchow, was anticipated by Addison (*Consumption and Scrofula*, 1849, p. 82) and Zimmermann (*Preuss. Vereinszeit*, 1852, pp. 64, 144, 239) in its most essential point, viz: the escape of the blood corpuscles; but no mention was made as to the manner of their escape, and the matter soon fell into forgetfulness. There can scarcely be a doubt but that the same laws prevail for man as for animals, but there still remain many points unanswered.

Cohnheim's views have since been confirmed on various sides, particularly by Kremiansky, of Vienna, who found an accumulation of pus cells around an irritated point in the cornea before even any cloudiness was manifested in the periphery, the white corpuscles, colored with cinnabar, being seen to migrate in from two to four hours. He contends, also, that not only pus, but also cicatricial tissue, pseudo-membranes and hyperplastic connective tissue, likewise, owe their origin in a great manner to these white blood cells, as he claims to have demonstrated the presence of these artificially-colored corpuscles in all these formations.

Koster (*Berl. Centr.*) has seen the same process in the liver, in an inflammation artificially created there.

The diminution in size sometimes observed in the smallest arterial vessels in the beginning of inflammation, is explained by a spasmodic contraction of their muscular tissue, which, in the smallest vessels, predominates over the elastic. The capillaries, in all probability, can neither contract nor dilate spontaneously. The various exudations, the second principal condition of inflammation, are now easily explained. The *serous* exudation differs but little from a transudation; it is generally cloudy, from small particles of fibrine, a few pus corpuscles and separated cells from the organ affected, with fat globules.

When the serous exudation is rich in albumen, it is called the *albuminous* exudation. It is now known that there is no difference between inflammatory and hydropic exudations. (Schmidt.)

The *mucous* exudation depends upon an increased secretion of mucous mingled with that escaping from the vessels.

The *fibrinous* exudation consists of fibrine, which leaves the vessels in fluid form and then coagulates, containing serum in its interstices. Pus corpuscles are almost always found in connexion (a return to the old doctrine, and in opposition to the view of Virchow, who considered it as produced in the parts in which it was

found). This exudation may undergo any one of the following metamorphoses: Contraction (*verschrumpfen*), change into connective tissue, fatty degeneration, calcareous degeneration, necrosis.

The *purulent* exudation has been already described in detail. Whether a pus cell can produce a pus cell is still unknown. Two or more of these forms are often combined.

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**Syphilization.** At a meeting of the New York Medical Journal Association, on Friday, the 4th ult., after the regular paper of the evening, Prof. Boeck, of Christiania, exhibited a patient who was still under treatment by syphilization. The patient had had a specific roseola following shortly upon a chancre contracted early in the fall of 1869. His arms, breast and thighs were covered with cicatrices left by the inoculations.

The Doctor made but few remarks, referring the interested to his recent paper on the subject in the *American Journal of Syphilography and Dermatology*. New inoculations were made, to illustrate the method, which consists in collecting a little matter from a ripe pustule upon the end of a sharply-pointed lancet, pricking the skin at three points by means of a rotatory movement of the lancet, held at right angles to the surface, and depositing a little of the pus upon each of the punctures. One puncture would be sufficient, but three are made to insure a "take."

Scarification is not resorted to, since it is less liable to be effective than a puncture. If the matter is a little old, or has dried up, it will not produce a pustule.

Among the doctrines of syphilization, the Doctor dwelt particularly upon that one which states that this method of cure is much less likely to be effective where mercury has been previously administered.

Attention was particularly called to the appearances of robust health manifested by the patient, who seemed well pleased with his condition.



## Correspondence.

LETTER FROM DR. A. ADDAMS.

*Doctrine of Life.--Dr. Watters.*

MR. EDITOR:

A pamphlet of 28 pages, under the title of *Dr. Watter's Doctrine of Life*, dated St. Louis, June 27, 1868, is circulating in this community. It contains a letter of Dr. Carpenter, of London, Burlington House, W., March 16, 1868.

He regrets to learn from a letter, by Dr. Watters, upon the "correlation and conservation of forces" (a copy of which had been furnished him by Dr. Watters), that he considers Dr. Carpenter to have unfairly neglected his claims, as the originator of the doctrine that the "so-called" vital powers, are correlated to the physical (that a memoir of his, upon the vital and physical forces, was read before the Royal Society, and published in the *Philosophical Transactions* of that year), etc., that Dr. Watters' thesis was not published until some months after the appearance of the memoir in the *Philosophical Transactions*. He concludes with saying, that he had long since ceased to care about credit for priority, in any doctrine he had promulgated. But he does care for his reputation for truth and honesty, and before calling this in question, and imputing to him that he had appropriated to himself Dr. Watters' ideas, or his language, the Doctor should have better informed himself as to the facts of the case."

In Dr. Watters' reply to the letter of Carpenter, dated St. Louis, June 27, 1868, J. H. Watters, Professor of Physiology, Pathology, and Clinic Medicine in the Missouri Medical College, says, in the year 1849, he commenced attendance on the medical lectures in the University of Pennsylvania, being already imbued *somewhat* in the principles of mathematics and natural philosophy by previous studies. Here, in the text-book on Physiology (Carpenter's), he was taught "dormant vitality." This was the straw that broke the camel's back. (Effeminate creature!) Here, he had the seed, neither dead nor alive, but its vitality was dormant, needing only



"stimuli" to arouse it." "All this seemed" to him "worse than jargon." "His reflections were excited." Air, heat, and moisture first act upon the seed, as upon other organic matter, and the difference of behavior must depend upon the *somewhat*, connected with the seed." The *somewhat peculiar*, in the seed, then, would not be a "dormant vitality," but a peculiar "*form*." The "*principle of the clock, and of the inclined plane*," now come into play. "A reflection occurred; it assumed the appearance of a *great truth*, like a *flash*." (It must have been an electric *stroke*.) "It was something real." "He felt it"—he conceived. His brain, the great nervous center, had been impregnated. The period of gestation continued during the remainder of the session. "He developed the conception," "by arguments, by illustrations, and by an application to various, vital phenomena." It was born—after some pretty strong parturient throes. But it was premature, "a germ, an ovum, or ovulum." He then and there determined "to devote himself to this germ." Nourished it. It proved to be viable. He rolled it up in his thesis; sent it to the public; into various climates, furnishing it, doubtless, with a wet-nurse, and money to bear their expenses. After the lapse of sixteen years, he presented it "to the world" in a *form* (beautiful and well-proportioned, no doubt), "worthy of the subject and of the audience." He then makes "an argument, with four points, which he states briefly, though he occupies twenty-three pages (pointedly). The *thread of the argument* is wound, round and round, this bantling (a proper child, beautiful and pleasant to look upon), with gems plucked from the spangled heavens, and "full many a gem, of purest ray serene, the dark unfathomed caves of ocean bear." (He descends in a diving-bell, and brings up the rich gems, with which to decorate this creature of his brain, whether male or female is not known.) The first and most brilliant is the "*somewhat*," which can not be dormant force, or dormant vitality, but a "*peculiar form*." "The clock moves only as the weights descend; that, as is the clock, so is the seed; that which determines its peculiar behavior, is the *form* that adjusts the organization." If the weights (gravity) be taken away, the clock will not move; so, why may not life and decay be reciprocal? "Vital force, abstract unities, metamorphosed, metamorphosis, motor. Death and life have to each other the relation of antecedent and consequent. Though death and life are so common, and so *natural*, yet it is no less difficult to tell why we die, than why we live, both are but evidences of the

*Creator's will.*" (A gem of purest ray serene.) We are constantly dying while we are living, and to arrest decay would be to arrest life. "The germ, or life force, fluid plasma."

Life is not derived from the parent. It has been the doctrine of some, that germ force is derived from the male parent; of others, from the female; while others hold that it is produced by both parents, at the same time, and in the same act, "as the germ is," but there are reasons to believe the germ force is no more derived from either parent, than galvanic force is derived from the individual who constructs a battery. Where is their *pow sto*? and if some *pow sto* be necessary for the generation of every *tertiam quid*, what is its relation to the generating of forces?

He concludes by referring to that part of Dr. Carpenter's letter, in which Dr. Carpenter says, "he has long since ceased to care about credit for priority, in any doctrine he had promulgated." Not so with Dr. Watters. "Whatever his intellectual offspring might be, if he were to fail to claim its paternity (maternity?) he would consider himself as lacking the first characteristics of manhood (the testes?)

A stray number of the *Humboldt Medical Archives*, 1867, is, to-day, in this obscure village, "right in the middle of the world." In it is a lecture on "What is Life?" by A. Hammer, M.D., Professor of Surgery, Ophthalmology, and Pathological Anatomy, in the Humboldt Medical College of St. Louis. This lecture is delivered before the medical profession of St. Louis. This is a lecturer of uncommon brilliancy, of great power, and wild-cat ferocity. Seventeen years before he delivered this lecture to the "so learned a body," which, *he* tells them, is not only not behind the profession of this continent, but ranks with the best of the entire country." He read an essay before the Medical Society of St. Louis, on Free Will, in which he treated, at large, in an anatomico-physiological manner, of the functions of the brain. At the time of reading the above essay, a clergyman of the *Methodist* denomination was, by certain members of the society, invited to refute his arguments, which he in reality attempted to do, but he feels sure of never meeting an opponent of a similar kind." Poor Methodist preacher, how you are to be pitied! for, after seeing how the hair flies at every stroke of the paw from Mr. Beale of England, the Methodist clergyman must have been literally torn to pieces.

In answer to the question, "What is Life?" he says, "the question is easily asked, but not easily answered." He says, "unhesi-

tatingly, that the present state of science does not enable him to give an *exhausting* definition." Imitating the example of a gentleman of this city, who, being asked, what is polarized light, with the unanswerable reply, polarized light is polarized light, he might tell them, Life is—Life.

He says Beale is a man of great reputation and great merit, but his merit has an end; that Beale is a living illustration of the fact that the vastest amount of knowledge is not sufficient; a little more is needed, and *that* is what Beale does not possess." After citing the works of numerous authors (which he has doubtless *hammered* until he beat out all their essence, and made it all his own), Aristotle, Muller and Prout, Virchow and Beale, he comes to the point, "What is life?" He can give no precise and *exhausting* definition, but is compelled to say he does not know what life is. After taking his hearers "in a retrograde march," backward, downward, he comes to the "mechanical motion, which is caused by *something* which is not motion itself." "Now," he asks, "what is that *something*? It has been named life, vital force, vital power, principle of life, essential force, original form, soul, etc.," but it remains to us an *x*.

He seems to have read Scripture, for he speaks of the truth of the Scriptural expressions of the "mote and the beam." Again, on the fifth or sixth day of the existence of the world, there was outspoken the word of creation, "*fiat*"—let it be. If a Hammer had taken the third verse of the first chapter of Genesis, he would have seen in the Hebrew, "God said light shall be, and light was." If, upon the thread of *his* lecture, the gems scattered profusely through his address are suspended, a "necessity exists" to make it of stronger materials than the ordinary thread of discourse, so ponderous is the weight. Upon the *chain* of argument, or upon a silver cord, is seen glittering these gems in pristine beauty. The cord is not only not behind any little girl's "charm-string" upon this continent, but ranks best in the entire country. "Hypothesis," by his own observation, the *ars medendi* (healing art). Though he has "entirely failed to free himself from the reproach of arrogance, in not showing why the nature and essence of life is not more difficult to understand than many other things." He goes on, "*exhaustingly*," *exhausting* definition (repeated), human microcosm, macrocosm, naturo-philosophic school, form of life, the cell, human organism, simple cell, "the same *so-called* forces." I intentionally say *so-called* forces, human organism and simple



cell, called all these in the empiric," "central apparatus of the nervous system, "feeling ourselves" (a quotation) "for him the whole world exists for us within ourselves." "So we feel ourselves." The brain is the arena of scientific researches. The surface of the brain forms the boundaries of the arena, transcendentalism, thinking, (a quotation) "psychology (he has quit translating the Latin and compound Greek words he uses before "his so learned audience"), anatomico-physiological manner, normal organized brain, phases of its metamorphosis, human *pride* and *arrogance*, "a talk with his brain."

The following ponderous names must be hung on the cord, at the risk of breaking it: Helmholtz, Mier, Grove, and others.

Concerning the correlation of forces: "We can not eliminate forces from scientific researches. Three hundred years have elapsed since Galileo died; we still speak of sunrise and sunset, though nobody believes it to be true, and therefore there is no harm in it. Microscopic spherules, a colloid mass; more ponderous names: Harvey, Hunter, Abernethy, Muller, Prout, that are taken from Beale's shoulders and placed on the cord. "The internal differentiation, chemico-catalytic, internal catalytic, the true genetic, spontaneity, aboriginal impulse, the internal catalytico-genetic act, the external plastic act, paleontology." Whew! exhaustive! exhaustingly!

If these gentlemen received their primary education in a country school in which the Testament was the common reader (now displaced by a series of readers from First to Sixth), or were Sunday-school scholars, they must know that the great Apostle Paul, more than eighteen hundred years ago, in his first Epistle to the Corinthians, fifteenth chapter, thirty-sixth verse, in answer to the question in the thirty-sixth verse, "How are the dead raised up, and in what body do they come?" said, most emphatically: "Thou fool! that which thou sowest is not quickened, except it die; and that which thou sowest, thou sowest not the body which shall be, but bare grain; it may chance of wheat, or some other grain; but *God* giveth it a body, as it hath pleased *him*, and to every seed its own body," and so on to the end of the chapter, the fifty-seventh verse.

The whole subject is here embraced, with clearness and conciseness, without any of the senseless jargon of "cell," "sperm," "ovum," "ovulum," "forces," and "motion," of these learned gentlemen.

Knowing this, and claiming priority in originating the physiological doctrine and first publishing it to the world, all will exclaim, "Oh, Shame! where is thy blush?" Not knowing, for their lamentable ignorance, the greater the shame.

Respectfully,

A. ADDAMS.

CYNTHIANA, KY.

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*Letter from Boston.*

BOSTON, MASS., March 10, 1870.

MESSRS. EDITORS:

The Medical and Dental Commencement of Harvard University took place yesterday, at the Medical College. The exercises consisted of prayer, by Rev. Prof. Peabody, the reading of selected dissertations, by their authors, conferring of degrees, and a valedictory address. Dissertations were read on the following subjects: 1. Lead Poisoning; 2. Aphasia; 3. Cleft Palate; 4. Alcohol; 5. Abscess of the Prostate; 6. Diabetes Mellitus. The author of "Cleft Palate" took strong ground in favor of mechanical rather than surgical aid in these deformities, and enumerated successful cases where the artificial palate soon rendered articulation quite natural.

President Eliot conferred the degrees, in his usual easy and graceful manner, addressing the trustees, faculty and graduates in Latin. Thirty-nine received the medical degree and twelve the dental. Nineteen graduated in July.

The annual address was by Rev. Prof. Peabody. I quote a brief report of it from the *Morning Journal*:

"After a few introductory words, he remarked that a great revolution had taken place in medical practice within half a century. Formerly the physician fought disease with drugs, as firemen fight a conflagration; and, as it frequently happens with the latter that the damage by water proves to be greater than that by fire, so many of the patients of the old-fashioned doctors recovered of the disease, but never of the medicine. Indeed, it was then urged in favor of the family physician as against others that 'he knows how much we can bear.' Much laughter was produced by this

remark, which was repeated when the speaker drew a humorous parallel between that practice and modern homeopathy, both of which, he said, consisted in 'the application of approved remedies in quantities not too small.'

"This faulty system of medicine to which he referred he attributed to the times rather than the men, many of whom were among the most eminent in the history of medicine. Nothing had so much contributed to elevate the medical profession as the decline of medicine and the corresponding recourse to the healing adaptations of nature, assisted by pure air, pure water and good nursing. The profession had learned to employ other means and methods than those which the apothecary's shop afforded, and sought in observation and the experience of the shop, the office, the field, and social life, for remedies by prevention for many insidious diseases.

"The speaker urged upon the graduates that their success depended fully as much upon what they were as upon what they knew; that while they should be life-students in their own profession, they should also acquaint themselves so far as possible with other branches of general learning; that each should seek to be pre-eminently a gentleman, which term he defined to be very nearly equivalent to a Christian; that they should cherish and cultivate humane feelings, and as far as possible manifest sympathy with the sufferers whom they were called upon to aid; and that, by some conversance with spiritual things, they should avail themselves of the many opportunities which would necessarily fall to them to minister unto needs deeper than the physical, and touch upon feelings which, rightly moved, were healing often both to the spiritual and the physical man.

"The discourse was listened to with close attention and commanded frequent applause. The public exercises closed with the pronouncement of the benediction."

In my last I referred to our State Board of Health, or "State Medicine." They have issued their first annual report to the Legislature, which is now in session. The report comprises some fifty-eight pages of printed matter, giving a historical sketch of the formation of the Board, its objects, and the results of its labors. They have corresponded with the local boards of health throughout the state; collected and published weekly the number of deaths and their prevailing causes, in the most populous cities and towns in the state; have investigated the condition of "lock-



ups," with reference to light and air; the pollution of streams by factories and tanneries; the influence of mill ponds upon health; the building of receiving tombs for the dead near public highways or in the vicinity of dwelling-houses; the effect of undrained lands; the alleged nuisance from charcoal pits. These and other subjects have received some attention from the Board.

Four subjects were selected for special investigation, viz: The prevailing modes of slaughtering, with especial reference to the supplies of fresh meat for the Boston market; the sale of poisons; the effects of the use of intoxicating liquors; and the comparison of the amount of sickness and mortality in different kinds of houses occupied by the poor. Upon the two first the Board have made extended reports. The present state law relating to the sale of poisons is as follows:

"If any apothecary or other person sells any arsenic, strychnine, corrosive sublimate, or prussic acid, without the written prescription of a physician, he shall keep a record of the date of such sale, the article, the amount thereof sold, and the person or persons to whom delivered; and for each neglect he shall forfeit a sum not exceeding fifty dollars. Whoever purchases deadly poisons, as aforesaid, and gives a false or fictitious name to the apothecary or other person, shall be punished by fine not exceeding fifty dollars."

This law is almost entirely disregarded by druggists, and has reference to only four dangerous drugs. The Board came to the conclusion that the only remedy was the better education of the dispensers of drugs. A bill to that effect was recently introduced into the Legislature. This bill prohibited any person to mix or sell drugs, as apothecary or apothecary's clerk, except graduates of some institution of education in pharmacy and medicine, and persons pronounced competent by a special board of examiners, consisting of three practical pharmacists. This bill was throttled in the House, thereby disregarding the recommendation of the Board. If legislators believe in "State Medicine," they also believe in *free medicine*, as their ever willingness to aid institutions nursed by all kinds and forms of quackery shows.

The report on slaughtering is more elaborate. As this is done within six miles of Faneuil Hall, and in the same manner as it was fifty years ago, it becomes a question of sanitary importance, as the city and its surroundings increase in population. The

whole subject is treated in its sanitary and pecuniary bearings; and the remedies for the evils seem to be: 1. "The prevention of putrefaction;" and 2. "The conversion of the offensive vapors resulting from boiling into inodorous and harmless gases." To accomplish this, the *practice of feeding the offal to hogs* must be dispensed with, and the *building of abattoirs and melting houses within the same enclosure*. The report, in conclusion, enumerates that the *sanitary advantages* of such a system would be:

1. The removal of the present offensive odor, which, as population becomes more dense, must affect public health.
2. The removal of slaughter-house pork from the markets.
3. The ready inspection of meat, thus insuring the rejection of that which is unfit for food.

*Economical* advantages are also set forth as the results of a better sanitary system.

Hydrate of chloral, as a hypnotic, has been used somewhat in this vicinity, and with much success in most cases. A further experience may determine some physiological questions as to its action on the blood and tissues of the body.

The famous Cardiff Giant is on exhibition here, much to the amusement, as well as the amazement, of the wonder-seeking population. A committee of physicians and others have had his case under consideration as to his origin and personal adventures, but I have not yet seen their report. It may be a difficult task, as none of his relatives survive.

I find, from the first annual report of the Children's Hospital, from July 20 to December 23, 1869, that there were 30 patients treated—16 males, 14 females; 12 medical and 18 surgical. Discharged well, 8; relieved, 2; not relieved, 3; not treated, 3; remaining, 14. There were no deaths.

The fifty-sixth annual report of the Trustees of the Massachusetts General Hospital and the fifty-second annual report of the Superintendent of the McLean Asylum, for the year 1869, have just been issued for distribution.

The expenditure of the hospital was \$62,238.60, being \$5,325.87 less than the year previous; while the average number of patients in the hospital has been fifteen per cent. greater. The average cost of each patient has been \$44.77; the cost per week, \$10.14.

The expenditure at the asylum was \$138,132.02; the average cost per patient was \$486.38; the weekly cost, \$14.20. The

expenses have been \$4,403.34 less than for 1868, while the number of patients has been thirteen per cent. larger.

The number of patients admitted to the hospital, 1390: males, 879; females, 511; being 125 more than in 1868. Patients paying board, 382 males, 150 females; paying part of the time, 22 males, 2 females; free, 475 males, 359 females. Number of patients treated during the year, 1517; paying, 563; paying part, 24; free, 930. Discharged during the year: well, 497 males, 274 females; much relieved, 67 males, 58 females; relieved, 142 males, 85 females; not relieved, 44 males, 34 females; not treated, 41 males, 26 females; died, 79 males, 28 females; insane and eloped, 13 males and 4 females. Number of patients remaining December 31, 1869, 72 males, 53 females. Proportion of deaths to the whole number of results, 7.70 per cent. 93 patients were received on account of recent accidents. The greatest number of paying patients at any one time was 55; of free patients, 98. 26 per cent. of the free patients were female domestics, 20 per cent. laborers, 15 per cent. mechanics, and 16 per cent. children. The average time of paying patients was 3.4 weeks; free patients, 4.3 weeks. Admissions refused, 243. Foreigners, 205; residents of Boston, 99; from the state, 129. 6953 were treated as out-patients: 2993 males, 3960 female. In the dental department, 931 were treated.

Dr. Tyler reports that there were at the asylum, January 1, 1869, 176 persons: 81 males, 95 females. Admitted during the year, 108: 64 males, 44 females; number under treatment, 284; discharged, 100: 54 males, 46 females; remaining, 184: 91 males, 93 females. Of those discharged, 51 (23 males, 28 females) were considered recovered; 5 males and 3 females were much improved; 10 males and 2 females improved; 5 males and 3 females not improved; 18 (9 of each sex) died. The proportion of recoveries to the whole number discharged is larger than usual. The deaths have been fewer than for a number of years; most have died from the result of chronic insanity, while others from the uncontrollable excitement of acute disease.

The few facts I have gleaned from the interesting reports of Dr. Shaw, at the hospital, and Dr. Tyler, at the asylum, must suffice at this writing.

B.



## Surgical Selections.

Arranged by Prof. MUSSEY.

**Mr. Roux**, of Meximieux, France, publishes a case of a girl six weeks old, with spina bifida, "the tumor hanging from the extremity of the sacrum to the lower third of both thighs." Treated by injection of iodine.

R.—Tinct. iodine, ℥iij.  
Potass. iodide, grs. 180.  
Aqua distil. ℥xi.

One ounce of the solution was injected, and left in for five minutes in the sac; the kneading process resorted to; the entire quantity injected was withdrawn by the syringe; and in a fortnight only a hard nucleus was left, as large as a walnut. Mr. Roux attributes his success to the occlusion of the canal by an assistant, and the withdrawal of the very last drop of the injected fluid.

**Cæsarean operation**, *post mortem*, birth of a live child, in Hôpital Necker, Paris. M. Alling, House Surgeon, performed the operation a few minutes after the death from repeated epileptiform fits. At first the child showed no signs of life. The "ordinary means" resuscitated the child, and a few days after the child was given to a wet nurse.

The interesting points in the case are "the intense morbid condition of the mother," repeatedly attacked with "fits," and falling from bed; the final violent agony, lasting more than half an hour; no recognition of the heart's action in the child; and an inanimate child resuscitated and life established.—*Lancet*, May 8, 1869.

**Mr. Fergusson** remarks, upon a case of stricture of the urethra, treated unsuccessfully by Holt's Dilator, but success-

fully treated by a perineal section the whole extent of the stricture, upon a staff. The patient had long been in the habit of taking 3j of solid opium daily, and in two months in the hospital the amount was only reduced to 18 grains daily.

**Mr. T. Spencer Wells** reports a third series of 100 cases of ovariectomy. Of the first 100 cases, 34 died, 66 recovered; of the second 100 cases, 28 died, 72 recovered; of the third, 23 died and 77 recovered. From extended observation, Mr. Wells has concluded that previousappings do not increase the mortality, may be useful, and that the danger from tapping is small. Dr. West agrees with Dr. Wells in these conclusions.

**A. Brace Buckle** was swallowed and impacted in the œsophagus fourteen days. T. Bond, F.R.C.S., B. S. Lond., carried down by a probang, and the Doctor supposes, three months after the operation, "it must still be in the stomach, as he can not believe that a body of such size could pass the bowel without being felt."

**Sir Wm. Fergusson** remarks, that in operations for cleft palate, the removal of anything but a narrow strip of mucous membrane is unnecessary, and that the failure of the operation often depends upon the removal of too wide a strip—"a raw surface on each side being all that is wanted to secure adhesion."

**Two Loose Cartilages in Knee Joint** removed by two separate operations by Holmes Coates, F.R.C.S., Surgeon St. Bartholomew's Hospital. The "much ado" about this case is amusing. We know a patient in this town that has a legion of them in both knee joints.—*Lancet*, May 15, 1869, pp. 667-8.

**Naso-Pharyngeal Polypus.** Mr. L. Thomas, Tours, France, presented a case to the Surgical Society of Paris, of fibrinosa, originating upon the basilar process, and invading the maxillary sinus of left side. The superior maxilla was sacrificed. In the operation the posterior nares was plugged.

**The** application of galvano-caustic in cutaneous nævus, mixed nævus, epithelial cancer, lupus, and cancer of the tongue, is reported as successful in the practice of Mr. Thos. Bryant, of Guy's Hospital.

## Editorial.

*The American Medical Association—Medical Education.*

In another part of this number we give the regular announcement of the next meeting of the American Medical Association, to be held in Washington, on the 3d of May. Immediately preceding that meeting there will be a session of the Convention of Teachers, the call for which appeared last month. There will not occur at these meetings any more important question than the shape in which some definite plan for American medical education will assume.

The points involved have been agitated again and again; the association has passed its formal recommendations; two conventions of teachers have been held in this city. All of these have doubtless made steps progressive, but none of them definite and final. Very many respectable physicians believe the time has now come to test the power of the American Association; to see if it be simply a bibulous and mutual admiration society, or if it have any controlling legislative influence and defined power.

In the Convention of Teachers the following questions, in our judgment, should be clearly determined, and a resulting plan submitted to the action of the American Association:

1. The amount of preliminary acquirements before a student shall be admitted to study medicine. We advocate, as the *least* that should be demanded, an equivalent to a high school course; ability to write and spell correctly, and the elements of the Latin language. But the onus of determining this must not be left with the colleges; otherwise it will continue as in the past, a farce.

2. Should medical teaching in this country be repetitional, as now, or progressive and graded? We are free to say that, theoretically, the latter is the true plan; but to its efficiency and usefulness there are many obstacles in the habits of American physicians and the wants of our forming state of society; and it is an important inquiry, whether we are prepared as yet to take positive advanced ground on this requirement.



3. Shall we extend the required time of study?

4. The extent of curriculum and professorships. Upon this point we are hearty in our condemnation of the old foggy persistence of a few of the most prominent, ancient, and influential schools of the country to adhere to old-time usages. There are old, respectable schools in this country, with large classes, that adhere to-day to a corps of seven teachers and less than five months' instruction, just as they did twenty years ago. In all this the new, vigorous schools of the country will demand a reconstruction, if they are expected to co-operate in other reforms.

6. The question of uniform fees will of course be made a prominent one; but we protest against this being the only important question at issue, as seems to be the idea of some of our over-zealous friends.

When the representatives of the schools assemble in Washington, next May, we hope they will come up with clear, well-defined plans of what should be *respected* as a course of medical instruction fitting the candidate for the doctorate. But having these mature plans, let us also strive to be practical in our purposes. Having determined these, let us then agree what is a fair compensation for the services of teachers, agreeing that uniformity of acquirement and uniformity of compensation are needful to advance the best interests of teaching.

In this matter of fees, we have no hesitation in saying that we believe it will be better for the schools to exact an increased rate. In this interior valley we think \$100 should be the uniform *lowest* rate of fee.

Then, having determined all these points of a full plan, let us submit it to the American Association for its indorsement *in all respects*. Then enact that no association—school or individual—who repudiates this plan, or graduate of such repudiating school, shall be entitled to representation or membership in the American Medical Association. If the association has strength and pluck to carry out such a plan of discipline, the schools will doubtless enter heartily into the plan; if not, not.

In this connection, we are constrained to say a few things additionally. Medical instruction, in the main, has steadily progressed in this country. The efficiency and completeness of instruction is far in advance of its status twenty years ago, say what desponding croakers will. So, too, we feel very sure that the great mass of physicians all over the country occupy a much higher position

as to attainments and professional scholarship than they did twenty years ago.

Again, as to progress in requirements, the fault is divided. There are competitions among the schools that tend to cheapen in all respects, the price and quality alike, of medical instruction; but students, encouraged by the advice of their preceptors, accept the situation and largely patronize "cheap schools," without regard to advantages or results—except the resulting diploma. So, once more we say, let us see what is the power of the association, and what is the extent of honest purpose on the part of the profession to sustain the progressive schools?

One word respecting endowed schools. Let such receive students of their own parish—their own field of endowment, state or city—at such nominal price as they see fit; outside of this territory, let them accept the comity of schools, or accept a ban of recognition, both of the association and schools.

*The Ohio Dissecting Law.* Just as we are making up the last pages of this number, we have received a copy of the above law as finally amended and adopted. We give it below in full, and our readers will judge of its value quite as well as we can. It will be observed that quite a number of guards and embarrassments have been thrown about it, which we fear will cripple its utility for practical dissection to some extent. It is, however, of significance that at last the old popular prejudices and usages are broken in upon, and the principle admitted of the propriety of practical anatomy as a study, under any circumstances or with any restrictions; and the law in such matters scarcely ever takes a backward course. The profession of Ohio is under obligations to Dr. Selden, of Shanesville, chairman of the committee on the part of the State Society, and to Dr. Jenner, of the Senate, who is the author and earnest supporter of the bill, and to all the medical gentlemen of the Legislature, who seem to have had this matter steadfastly and earnestly at heart.

*"Be it enacted by the General Assembly of the State of Ohio:* That it shall be lawful in this state to deliver to the professors and teachers in medical colleges and schools, and to the members of county medical societies that are or may be auxiliary to a state medical society, and for said professors and members to receive the remains or body of any deceased person for the purpose of medical and surgical study; Provided, that said remains

shall not have been interred, and shall not have been desired for interment by any relative or friend of said deceased person, or by some county or township officer, within twenty-four hours after death; provided, also, that the remains of no person who may be known to have relations or friends shall be so delivered or received without the consent of said relatives or friends; and provided, that the remains of no one detained for debt, or as a witness, or on suspicion of crime, nor of any traveler or stranger, nor of any person who shall have expressed a desire at any time that his or her body may be interred, shall be so delivered or received, but shall be buried in the usual manner; and provided, also, that in case the remains of any person so delivered or received shall be subsequently claimed by any surviving relative or friend, they shall be given up to said relative or friend for interment. And it shall be the duty of said professors and teachers decently to inter in some public cemetery the remains of all bodies after they shall have answered the purposes of study aforesaid; and for every neglect or violation of this provision of this act the party so neglecting shall forfeit and pay a penalty of not less than twenty-five nor more than fifty dollars, to be sued by the next friend, for the benefit of the nearest of kin.

"SEC. 2. The remains or bodies of such persons as may be so received by the professors and teachers aforesaid shall be used for the purposes of medical and surgical study alone, and in this state only; and whoever shall use such remains for any other purpose, or shall remove such remains beyond the limits of this state, or in any manner traffic in the same, shall be deemed guilty of a misdemeanor, and shall, on conviction, be imprisoned for a term not exceeding one year in a county jail.

"SEC. 3. Every person who shall deliver up the remains of any deceased person, in violation of or contrary to any or all of the provisions contained in the first section of this act, and every person who shall receive said remains, knowing the same to have been delivered contrary to any of the provisions of said section, shall, upon indictment and conviction, be fined in any sum not exceeding one thousand dollars nor less than three hundred, and be imprisoned in the county jail not more than six months; and it shall be the duty of the judge of the Court of Common Pleas, at every term thereof, in the charge to the grand jury, to give especially in charge the provisions of this act.

"SEC. 4. This act shall take effect from and after its passage.



Nothing contained herein shall be so construed as to interfere with or repeal any laws now in force the purpose of which is to prevent grave-robbing."

**Commencements of Medical Colleges.** *Indiana Medical College*—This new school has had a remarkably successful course, and held its first commencement on the evening of February 28, with twenty graduates.

*Starling Medical College*, at Columbus, graduated a class of twenty-four on the evening of March 1.

*Rush Medical College* held its annual commencement on the evening of February 2, with a very large graduating class and interesting ceremonies.

The third commencement of the Medical Department of *Washington University* took place at Masonic Temple, in the city of Baltimore, on the evening of February 22, with forty-eight graduates.

Degrees were conferred on 140 graduates at the *Bellevue Hospital Medical College*, New York, on Saturday, February 26.

At the *College of Physicians and Surgeons*, New York, on March 2, there were seventy graduates.

At Nashville there were fifty-eight graduates in the Medical Department of the *University of Nashville*.

At Buffalo the Medical Department of the *University of Buffalo* graduated forty-one.

As yet we have received no announcement of the graduating classes at Philadelphia, Louisville, and St. Louis. As stated in the letter of our Boston correspondent, the graduating class at *Harvard* this year is thirty-nine.

**The Medical Society of Covington and Newport** held its regular monthly meeting at the residence of Dr. N. B. Shaler, in this city, on Tuesday night, March 8. The annual election of officers of the society took place, with the following result: President, Dr. G. W. Thornton, of Newport; Vice President, Dr. D. H. Jessup, of Covington; Secretary, Dr. James S. Wise, of Covington; Treasurer, Dr. W. W. Henderson, of Covington. The following delegates were elected to the State Medical Convention, which meets at Bowling Green, Ky., the first week in April: Drs. W. W. Henderson, C. Kearns, and D. H. Jessup, of Covington, and G. H. Stewart, of Newport. A resolution was unanimously

adopted instructing the delegates to invite the State Medical Society to hold its next convention in Covington. Delegates were also selected to attend the meeting of the American Medical Association, in Baltimore, next April, as follows: Drs. G. Thornton, W. W. Henderson, N. B. Shaler, R. Pretlow, and Dr. Perrin.

AMERICAN MEDICAL ASSOCIATION,  
OFFICE OF PERMANENT SECRETARY. WM. B. ATKINSON, M.D., }  
1400 Pine Street, S. W. Cor. Broad, Philadelphia. }

The twenty-first annual session will be held in Washington, D. C., May 3, 1870, at 11 A.M.

The following committees are expected to report:

On Cultivation of the Cinchona Tree—Dr. Lemuel J. Deal, Pennsylvania, Chairman.

On the Cryptogamic Origin of Disease, with special reference to recent microscopic investigations on that subject—Dr. Edward Curtis, U.S.A., Chairman.

On the Doctrine of Force, Physical and Vital—Dr. J. H. Waters, Missouri, Chairman.

On Variola—Dr. Joseph Jones, Louisiana, Chairman.

On the Relative Advantages of Syme's and Pirogoff's Mode of Amputating at the Ankle—Dr. G. A. Otis, U.S.A., Chairman.

On a National Medical School—Dr. F. G. Smith, Pennsylvania, Chairman.

On Commissioners to Aid in Trials involving Scientific Testimony—Dr. John Ordronaux, N. Y., Chairman.

On the Climatology and Epidemics of States—One member from each state.

On Veterinary Colleges—Dr. Thomas Antisell, D. C., Chairman.

On Medical Ethics—Dr. Lewis A. Sayre, N. Y., Chairman.

On American Medical Necrology—Dr. C. C. Cox, Maryland, Chairman.

To Memorialize State Medical Societies—Dr. N. S. Davis, Illinois, Chairman.

On Nomenclature of Diseases—Dr. F. G. Smith, Pennsylvania, Chairman.

On Medical Education—Dr. T. G. Richardson, Louisiana, Chairman.

On Medical Literature—Dr. J. J. Woodward, U.S.A., Chairman.

On Prize Essays—Dr. Grafton Tyler, D. C., Chairman.

*Voluntary* communications will be presented by—

Dr. John Curwen, Pennsylvania—On the Proper Treatment of the Insane.

Dr. Nathan Allen, Massachusetts—On the Physiological Laws of Human Increase.

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary.

Any respectable physician who may desire to attend, but can not do so as a delegate, may be made a *member by invitation*, upon the recommendation of the Committee of Arrangements.

W. B. ATKINSON.

***Practical Chemistry***, so far as the preparation of standard drugs is implied, is being carried to a very high state of perfection in this city. For example, we recently visited the laboratory of Mr. W. J. M. Gordon, and studied all its varied arrangements and plans for manufacturing chemicals. Mr. Gordon makes vast quantities of a fine quality of glycerine; and to show the great change which is going on in many of these matters, we may simply remark, Mr. Gordon pays over \$20,000 a year to one house in this city for refuse material for the manufacture of glycerine, which formerly went out into the city sewers! So much for utilizing the waste-products. In this laboratory we also found attractive processes under full headway for the manufacture of bromide of potash, hydrate of chloral, and other chemicals in particular demand. Physicians and druggists from the country may find it worth while to look through this laboratory and see what is doing. The proprietor will gladly make them welcome, and explain the details of his work.

***Susceptibility*** to the action of toxic substances varies greatly in different persons; and more, perhaps, in relation to the effects of lead than of any other agent. While the multitudes who, with impunity, make constant use of water, beer, cider, and other beverages, drawn from lead pipes, or who employ saturnine cosmetics without apparent injury, show that probably the majority of mankind are not liable to be affected by very minute doses of lead, the exceptional cases of serious poisoning by apparently infinitesimal quantities of this metal are sufficiently numerous to enforce the utmost caution in its use. Instances are on record of lead-poison-



ing from drinking champagne out of a bottle in which a few small shot, used in cleaning it, had been left; from a single application of a cosmetic; from spending but a few hours in a freshly-painted room, etc. That in such susceptible patients poisonous effects may and do arise from drinking water from lead pipes or lead-lined cisterns is a matter of certainty; and, inasmuch as it is impossible to say beforehand who is or who is not likely to be thus affected, we would add our voice to the mass of testimony already adduced in favor of the universal replacement of lead pipes by those lined with block tin, at all events as far as concerns buildings hereafter to be erected.

*Medical Department U. S. Army.* The current expenditures of the medical department during the fiscal year ending June 30, 1869, were \$233,561.21; the total expenditure of that department, including "war debts" and "refundments," was \$708,305.36, and the available balance on hand at the close of the year was \$1,792,050.73. The health of the troops has been good. Yellow fever has appeared at Key West only, and at this point there were 43 cases and 21 deaths; but, by the prompt removal of the troops to a new station, the ravages of the disease were at once stopped. The total number of cases on the sick list during the year was 104,235. The average number constantly on sick report was 2,367, or about 5.5 per cent. The number of deaths was 548; of discharges for disability, 1,128. The first volume of the "Medical and Surgical History of the War" is being printed. The number of commissioned medical officers for duty on June 30, 1869, was 161, being an average of one medical officer to 204 men. The number of posts was 239, beside detachments and outposts. There are now two vacancies of surgeons and forty-two of assistant surgeons in the medical corps. The experience of the past three years has shown that the present organization of the medical staff is satisfactory; but that even were all the vacancies in it filled, it would still be barely adequate to the demands made upon it.—*N. Y. Med. Journal.*

*Cohnheim's Alleged Discovery Again.* M. Feltz is another observer who has examined the question of Cohnheim's alleged discovery of the passage of white globules through the capillaries; and the experiments of M. F. do not confirm the theory of the latter.

**Academy of Medicine.** At the meeting of Academy of Medicine, on Monday evening, March 7, the following officers were elected: President, Dr. William Carson; First Vice President, Dr. B. F. Stevenson; Second Vice President, Dr. P. S. Conner; Recording Secretary, Dr. Jas. T. Whittaker; Corresponding Secretary, Dr. E. B. Stevens; Treasurer, Dr. W. T. Brown; Librarian, Dr. W. B. Davis; Trustees, Drs. W. P. Thornton, J. P. Walker, J. Unzicker.

**Cincinnati Hospital.** At the examination to supply the six vacancies of resident attendants in this institution, the following gentlemen were selected: Drs. J. N. McCormick, J. P. Green, and R. F. Erdman, recent graduates of the Miami Medical College, and Dr. F. P. Anderson, of the same college, undergraduate; also, Drs. R. J. Clark and F. Stich, graduates of the Medical College of Ohio.

**Ohio Medical College.** The old graduates of this school will be pleased to know that the secretary is preparing a full catalogue of all its alumni from the beginning. Can any old alumnus, or other friend, furnish information concerning the years 1823, '24 and '25? Were sessions held these years? and, if so, where can the graduating lists be obtained?

**The Michigan University Medical Journal** is the title of a new candidate for favor, and commences its existence with the issue for March, 1870. The initial number contains a fair amount of good matter, and is intended additionally to place the faculty before the profession of the country fairly. We place it on our exchange list with pleasure.

**A New Southern Journal.** Dr. Love, of Albany, Ga., proposes at an early day to establish a medical journal, especially devoted to the interests of the "practitioners of the cotton zone and sugar zone." It will probably be issued from Atlanta. As we have not heard from our Georgia friends for a long time, we shall welcome such a journal to our table.

**Who is Dr. O. H. Thomas,** who left money at this office about the 1st day of March? Will he please give us his address?

## Reviews and Notices of Books.

*A Practical Treatise on the Diseases of Children*, by Alfred Vogel, M. D., Prof. in the University of Dorpat, Russia. Translated by Dr. H. Raphael, of N. Y.

Translations from one language into another must be either *ad verbum* or *ad sensum*. Certain works, we admit, will frequently demand the former method. But the subject matter of the work before us, and the lucid style of its author demand the *ad sensum* method, and the *ad verbum*, too, ought not to be so very far from it. German sentences, however, even of the most lucid authors, must frequently be broken up into several small ones, in order to give them a clear, readable, English form. "One thing at a time," is an indispensable rule in writing English. Any one who has tried the task of translation from German, properly, knows the pertinency of our remarks. The translator of this work, no doubt, felt the onerousness of his task, but we can not in conscience, congratulate him on his overcoming it. We will take the trouble of calling his attention to a few particular places:

Page 1, last sentence of the first section needs reconstruction.

P. 3, second section, *idem*. Besides, what does the translator mean by an "*alternate* action of the air and blood in the lungs? Does the blood stop its action while that of the air is going on?"

P. 4, seventh line from top, we are told of "a fluid that almost always *reacts with acid*." Well, what? Could the original have meant any thing else but a fluid which gives an acid reaction?

The sentence next to the above needs also looking after.

On the last line of the same page, the translator speaks of the flat scales in the meconium as resembling in their "*entity*" those of the vernix caseosa. We demur to the philosophic word "*entity*," which is used in metaphysics with reference to the question of existence or non-existence. In medical language the word "*nature*" is perfectly sufficient for the word "*wesen*," which is likely to be the one of the original.

P. 5, second section, "—— an '*excessiveness*' or deficiency,



etc." The tail end of "excessiveness" is an excess, as "excess" would be sufficient, and more is a deficiency in the translation.

P. 8, "ninth line from top. "The fontanelles are *conditional* upon the development of the skull." "Conditional" is an adjective which ought to, but here does not, either predicate or qualify. The word should have been "conditioned."

P. 10, eighteenth line from bottom, "*To whom, etc., etc., let him, etc., etc.,*" is not English.

P. 11, eighth line from top. The whole sentence here is wretched. "Firm" is an adjective, and can not qualify "ossified," another adjective.

P. 12, twelfth line from bottom. Idem.

P. 13, seventh line from bottom. "*Under the irregularities of physiological dentition, the following observations may be made.*" Wonder whether these observations are regular or not? There is sense, no doubt, in the original, but in the translation—we guess not.

P. 14, second section, second sentence. "The first obstacle," the translator says, "can not be removed," but "can be replaced by," etc. Well, what good if an obstacle is only *replaced*?

P. 15, eleventh line from bottom. "Pædiatricars." We are glad to have a single word introduced into our medical vocabulary by which to express, "The therapeutics of the diseases of children." Let us have then the word "Pædiatry," and let the specialist of this department be called "Pædiatrist," but why use this outlandish "Pædiatricar?"

We might go on quoting other bad translations on nearly every page of the book, but let these suffice so far for the translation. If the task of translating is an onerous one, as we readily admit, still it need not be an unsuccessful one necessarily.

The matter of the book is highly commendable in every respect. We hail it as valuable addition to the pædiatric literature of our language, although the latter is murdered considerably in the translation.

We recommend the work, even as it is, to the thoughtful, *reading* physician, to whom the original is a sealed book. He will find it full in every department of the subject, and particularly so, in ætiology and diagnosis. The therapeutics of the author do not differ materially from the present usual run of the European style. The author moves cautiously between nihilism and polypharmacy.

The personal appearance of the work is very creditable to its publishers. It is a refreshing break upon the monotonous style to which American publishers of medical books have been addicted for many years. The book is on sale by Robert Clarke & Co., 65 West Fourth st., Cincinnati. Price \$4.00. E.

***Obstetric Aphorisms***; for the use of students commencing midwifery practice. By JOSEPH GRIFFITHS SWAYNE, M. D., Lecturer to Bristol Medical School on Obstetric Medicine. From the fourth revised eighth edition, with additions, by Edward R. Hutchins, M. D. Philadelphia: Henry C. Lea, 1870.

When a book, even so small and unpretending as the one before us, has passed through four editions, there is fair reason to believe it meets a want, and has got beyond severe criticism. The manual before us contains in exceedingly small compass, small enough to carry in the pocket, about all there is of Obstetrics condensed into a nutshell of Aphorisms. The illustrations are well selected, and serve as excellent reminders of the conduct of labor—regular and difficult: it will be observed, however, that this is intended as a guide for the *student*, therefore the management of cases of unusual difficulty, use of forceps, etc., are not given, because the student is expected to send for assistance.

For sale by Robert Clarke & Co. Price \$1.25.

***Transactions of the American Medical Association.***  
for 1869. Vol. XX.

The published volume of Transactions, for the meeting at New Orleans, is larger than its predecessors for some years past, and there is naturally suggested the query whether the committee on publication might not have used the discretionary shears to good advantage. We find, however, the matter embraced is of value and much of it will grow in importance, as a source of future reference.

More than usual time was occupied by the last meeting, in the consideration of legislative topics, and we find, accordingly, several reports on educational, and other matters, that will be read with interest. There are two valuable papers, by Dr. Joseph Jones, who always brings much careful research to all he writes; one, is respecting Mollities Ossium; the other, on Albinism. We also have several surgical papers, by Professor Whitehead and Dr. Shuppert. There are several excellent reports on Climatology

and Epidemic diseases, from committees representing Massachusetts, New York, Texas, and California. Two prize essays are included: one by Dr. S. S. Herrick, of Louisiana, on Quinine as a therapeutic agent; the other, by Dr. R. Bartholow, of Cincinnati, on Atropia and its salts. There are several other papers and reports—these being the leading ones. It can not fail to be a source of gratification to the members and the profession generally, that at length the treasurer reports the association out of debt and a balance in the treasury. Persons desirous of procuring copies of the Transactions, for 1869, may obtain them by addressing either Dr. Caspar Wistar, Treasurer, or Dr. F. G. Smith, of Philadelphia. Price \$5.

**New Books.** *J. H. Bennett.* Clinical Lectures on Practice of Medicine. Wm. Wood & Co.

*A. Flint, Jr.* Physiology, Part III. Appleton & Co.

*Butler's* Half Yearly Compendium, Part V.

*Meigs & Pepper.* Diseases of Children.

Bellevue Hospital Reports. Vol. I, 1870.

*Dr. Tyson.* The Cell Doctrine. Lindsay & Blakiston.

*Fox—Tanner.* Clinical Medicine. H. C. Lea.

American Pharmaceutical Association. Transactions for 1869.

*A. Flint, Jr.* Chemical Examination of Urine. Appleton & Co.

*Napheys.* Modern Therapeutics. S. W. Butler.

**Literary Exchanges.** The best American literary periodicals are regularly on our table, and we feel that we do a favor to our readers to call occasional attention to their merits. One of the best monthly publications in this country intended for the Young Folks is entitled *Golden Hours*, and is published by the Methodist Book Concern of this city at \$2 a year. Any Methodist clergyman will secure it for you at this price. Fields & Osgood continue to place us under obligation by the receipt of the *Atlantic*, *Every Saturday*, and *Young Folks*. We have already noticed the great improvement in *Every Saturday*, the change of style and illustrations certainly making one of the best illustrated Weeklies in this country; a new story by Dickens will commence in it about this time. Every body knows the excellence of *Harper's Monthly*, adapted to every family circle and to almost every conceivable taste or want, price \$4 a year. Lee & Shepherd issue *Oliver Optic's* magazine in a weekly and monthly edition, and parties



may order either at the same price, \$2.50 a year. *Godey's Lady's Book* is now in the enjoyment of its Fortieth year! It loses none of its attractions with age. Price \$3 a year.

*Proceedings of the American Pharmaceutical Association*, year 1869. The Seventeenth Annual Meeting of the Association was held in the city of Chicago in September last and the Permanent Secretary, Mr. John M. Maisch, certainly deserves a great deal of credit for the prompt appearance of so voluminous a report. The report on the Progress of Pharmacy, is always a valuable part of the Transactions, and it is unusually full of interest this year, prepared by Dr. F. Hoffman. There are also quite a number of short and excellent special reports, volunteer reports, and essays. Those interested in the next issue of the U. S. Pharmacopia will find in Dr. Squibb's report many excellent and suggestive hints. Any of our readers who desire a copy of this Report, can procure it by transmitting \$2.50 to Mr. Maisch, 1609 Ridge street, Philadelphia.

*Half Yearly Compendium of Medical Science*, Part V, January, 1870, is at hand. Edited by Drs. Butler, Brinton and Napheys. It fully sustains all that we have hitherto said of it, and we think it will continue more and more to fix itself among the necessities of American physicians. While it gives the condensed cream of the journals of the continent, we find among the authorities cited, all the medical journals of America of any importance; so that the leading contributions of American physicians and surgeons now have their permanent place in this compendium. Two large handsome parts make up the annual volume. Price \$3 a year, or *Lancet & Observer* and *Compendium* for \$5.

*Clinical Lectures on the Principles and Practice of Medicine*. By John Hughes Bennett, M. D., F. R. S. E., etc. Fifth American from the Fourth London edition, etc. New York: Wm. Wood & Co. 1870.

We have heretofore noticed with very hearty commendation this book. We called the attention of our readers to the edition of 1867 with special care, pointing out the several features of addition and amendment at that time. The present edition of 1870 appears to us to be essentially a reprint of 1867, and therefore we

see but little to add to our remarks of that date. Bennett's practice—opinions—clinical experience—have had great influence upon the views and practice of the practitioners of this age, and whatever may be the ideas and tutelage of young gentlemen entering upon the practice of medicine, they will wish to procure a copy of Bennett, and learn his views.

For sale by Robert Clarke & Co. Price, cloth, \$7; sheep, \$8.

***The Physiology of Man***, designed to represent the existing state of Physiological Science, as applied to the functions of the Human Body. By Austin Flint, jr., M. D., Prof. of Physiology in the Bellevue Hospital Medical College, etc. New York: D. Appleton & Co., 1870.

This is the third volume of the complete work on Human Physiology, which for some time has been in preparation, and issued in parts, by Prof. Flint. As each volume has appeared we have made such editorial comment as it appeared to merit, and in the main we have been glad to praise the labor bestowed upon this work of authorship. The volume before us treats of *secretion; excretion; ductless glands; nutrition; animal heat; movements; voice and speech*. It is of interest to the reader that some of the subjects treated of in this volume have been of such special interest to the author as to be made the subject of particular experiment, so that while we have embodied in this volume all that is of importance heretofore known, we have the experience and observation of the author as contained in his original experiments.

One more volume will complete the series; and we have no doubt but all American physicians interested in their studies will desire to purchase the set; for the fourth volume there remains the functions of the nervous system, and the processes of generation and development; we are assured this last volume will appear very soon.

We can not speak too highly of the mechanical execution given these volumes, thus far, as they come from the press of Appleton & Co.

For sale by Robert Clarke & Co. Price \$4.50.

***Modern Therapeutics***; a compendium of recent formulæ and specific therapeutical directions. By Geo. H. Napheys, A. M., M. D. Philadelphia: S. W. Butler, M. D., 115 South Seventh street, 1870.

Most of the matter of this volume before us has already appeared in detached chapters in the *Philadelphia Reporter*, during the past year. The author has now collected the various formula thus presented to the profession, and has arranged them in a regular classified order that will make the book convenient for reference; their remedies, and the formula for their use employed by dis-

tinguished physicians, for special groups of diseases, will be found under appropriate heads: diseases of the nervous system; of the digestive apparatus; of the skin, etc., are generally grouped each under its own department. To these are added formula for hypodermic medication, and inhalation; also some remarks on the use of the narcotic chloral. Take it altogether, this little volume will be found convenient, and will doubtless meet with a large sale.

For sale by Robert Clarke & Co. Price \$2.25.

***Bellevue and Charity Hospital Reports, 1870.*** New York: D. Appleton & Co.

We are glad to welcome this volume to our table. Nothing so determines the medical status of a city as its clinical advantages and its clinical contributions. The old Pennsylvania hospital has now issued two annual volumes of reports, and it is high time that other leading hospitals of America should follow in the suite. This first volume, from the Bellevue hospital, contains a large amount of valuable matter. The whole field of medicine and surgery is embodied in the several chapters. We find contributions by Prof. Taylor, Prof. Flint, sen., Prof. Sayer, Prof. Hamilton, etc., showing that the staff of the hospital are earnestly at work, and earnestly disposed to contribute their share to the great field of medical literature.

In this first volume we have an introductory chapter, exhibiting the position and advantages of the Bellevue hospital, and then fourteen papers on various topics of surgery, anæsthesia, diseases of women, physical diagnosis, etc., illustrated by the experience of the wards in the hospital. It would afford us great pleasure, if we had the space, to give full extracts, showing the experience of the gentlemen working in the wards of the institution. We trust the Cincinnati hospital will soon find it wise to issue their annual volume of experience, contributing to the general stock of professional knowledge.

***Errata.*** By some carelessness in proof-reading several vexatious errors found their way into the report of Dr. Wright's Lecture on *Cephalic Version* in the January number, and which should have been corrected before this but were overlooked.

On page 49, 7th line from bottom, for *breech* read *head*.

" " " 5th " " " " *prepuce* " *pressure*.

So in printing Dr. McElroy's article last month, we have

On page 151, 6th line from bottom, for *lime* read *chlorine*.

" " 152, 8th " " foot note, read *construction* instead of *constitution*.

On page 152, 9th line from top, omit "*one of*."

" " 153, 2nd " " " " for *firm* read *form*.

" " 154, 4th " " " " *even* read *over*.



THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Vol. XIII.—MAY, 1870.—No. 5.

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Original Communications.

*Art. I.—A case of Myalgia, with Comments.*

By JOHN D. JACKSON, M. D., Danville, Ky.

On Saturday, June 27, 1869, was called to see Mrs. O., of Garrard county, Kentucky, in consultation with Drs. Walter H. and John B. Owsley.

The lady in question was 55 years of age, married, the mother of a family, of good development, black hair and eyes, fair complexion, and represented as having generally enjoyed good health in her life. She was in excellent circumstances, possessing all the comforts of life, and her hygienic surroundings were good.

Something more than two weeks previous, while engaged at work with her sewing machine, she experienced a pain in her back, which gradually extended to all her limbs, but particularly affected her lower extremities. Increasing in severity within a few days' time, she became bedridden, and while suffering constantly, she endured agony whenever any pressure was made upon

her flesh. She says, that every muscle of the lower portion of her person from the pelvis down, has been, and is yet most acutely tender to the touch, and particularly does she complain when pressure is made down the course of the great sciatic nerve.

The case had been looked upon as one of rheumatism, but an inquiry elicited the fact, that there had never been any swelling of the joints, nor was there then, the least tumefaction. She has never had any fever, nor has she suffered from the profuse sweatings so customary in rheumatism. While the family say that she has in her life had one or two mild attacks of rheumatism, yet the patient says herself, that she has never had her joints swollen at any time, though has had what she supposed to be rheumatic pains in her shoulders—at one time continuing for some two or three weeks. Upon examination, none of the limbs appear in the least degree swollen or reddened, yet she is very sensitive to pressure over the muscles though not at all so over the joints. On making firm pressure over the vertebræ, tenderness is perceived to commence over the last of the dorsal vertebræ, and to increase over the lumbar spinous processes, until it is found to be exquisitely sensitive over the last lumbar vertebra and the sacrum. She avers that her limbs as they lie in contact with the bed, seem to pain her by their very weight, and that any change of position requiring a movement of the muscles, is attended by a great increase of suffering. A couple of days since, she was assisted out of bed, and getting upon her feet, came near fainting, and was put back to bed at once, so great was the pain in the soles of her feet on standing upon them.

Her pulse is regular, moderately full, and 74 to the minute, tongue clean, and skin cool and moist; her appetite has failed her, and her bowels been inclined to become constipated, but have been prevented from becoming so, by the repeated use of salts. Her sleep has been but little, save when artificially produced by opiates, so constant has been her pain.

As said, the case had been viewed as one of rheumatism, and inasmuch as there had not been any inflammatory symptoms, treated rather expectantly and palliatively, the principal means used being nitre and opiates, though no decided improvement followed their use, but on the contrary she gradually grew worse.

Upon carefully reviewing the case, while perceiving the general resemblance of its outlines to those of ordinary inflammatory

rheumatism, yet an attentive scrutiny shows some salient points of difference. There has been no fever, there has been no profuse diaphoresis, there has been no swelling of the joints—instead of the fibrous tissues, which we know to be the seats of election in rheumatism, having been affected, they seem to be totally free from trouble, and the tissues of the voluntary muscles are the especial foci on which the disease has culminated. There are some symptoms present rather suggestive of trichiniasis, but an inquiry elicits the reply that there has not at any time been any palpable œdema, and supposing any infection to be sufficiently great to produce the general and very severe pain of the lower limbs with which she now suffers, we would be led to expect a similar condition of things in the upper extremities; besides, the limbs have not the characteristic *gum elastic* feel described by Friedrich, nor are they or any other portion of the body œdematous, nor has there been any fever, or the profuse perspirations attendant on the malady when well marked. Besides, though between two and three weeks have elapsed since the onset of the affection, she has not at any time become hoarse, nor suffered with frontal headache and the characteristic pain at the root of the nose, nor are her eyes at all reddened, or has her sight been at all disturbed.

There remained then but one other affection to class it with, viz: myalgia, and to this it answered in every particular, save being more general—affecting more than half of the body, and the attack to be so acute, continuing unusually prolonged.

We agreed to put the patient upon quinia and iodide of potassium, three grain doses of the former, and eight of the latter, three times daily; it was also agreed to apply a fly-blister over the spinal column, covering the whole of the region of marked tenderness.

Upon the Thursday following, July 1st, again saw the patient along with the Drs. Owsley and Dr. Burdett, of Lancaster:—aspect that of one much more comfortable than when last seen, pulse 68°, temperature 98½, says that she is entirely free from pain, on pressure, and has been so from the hour the blister on her back drew. She can now move her limbs with very little pain to herself, and the evening previous, stood upon her feet, and took a few steps, with but very slight suffering.

For some reason, only the quinia had been given, the iodide of potassium being omitted. It was agreed to resume the prescription



formerly agreed upon, and upon any marked return of the pain, to reapply the vesicatory. Three days subsequently I heard from the patient, and learned that she was sitting up out of bed, and getting along comfortably in all respects.\*

## COMMENTARY.

The affection under consideration, though not exceedingly rare, is not particularly described in any but our most recent text-books. Neither Watson, Wood, Bennett, Chambers, Aitkin, nor Trousseau describe it. The only authorities we have found especially mentioning it, are Dr. Austin Flint, Sr., in his recent work on the *Practice of Medicine*, Dr. Alfred Baring Garrod, in *Reynolds' System of Medicine*, and Niemeyer in his *Text Book of Practical Medicine*. They all three treat of it briefly under the head of muscular rheumatism, though the two first point out its markedly different external characters, and admit the great probability of an essentially distinct pathological difference. The former author, while treating of it under the heading "Muscular Rheumatism," says that: "This affection so far as we can judge of its pathological character, is allied to neuralgia; it is probably a neuralgic affection, and as such, may be properly called *myalgia*, and might with more intrinsic propriety, have been considered under that head, than in the present connection." Dr. Garrod, after alluding to the common supposition that muscular rheumatism is closely allied to articular rheumatism, the difference in symptoms depending upon the difference in the anatomical nature of the structures involved, says: "Some reasonable doubt, however, may be entertained of the correctness of this opinion, for the following reasons: If the proximate cause of the muscular affection is the same as that of the articular, the heart would probably become inflamed in a certain proportion of the cases; but it is not so, and again, there is an absence of the peculiar secretion from the skin, so marked in articular rheumatism. The state of the blood has not yet been ascertained, but there is reason for believing that the fibrin is not much augmented." He might have added, that another difference exists, in the shorter course which the acute form of myalgia runs, as compared with acute articular rheumatism. While agreeing with Dr. Flint in pronouncing the disease

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\*Sept. 26. Learned that her health had been entirely restored, without any return whatever of the pain, though she remained quite feeble for several weeks after the attack.

neurotic rather than inflammatory, and\* therefore more nearly allied to neuralgia than rheumatism, yet we can scarcely agree with him when he calls it "a neuralgic affection," classing it with the neuralgias as he does in another part of his work.

The fact that in myalgia the pain in the parts is comparatively tolerable, while they are in a perfectly quiescent state, but is greatly increased on the slightest movement or firm pressure, and the sensitiveness is diffusely spread over the muscles, while neuralgia is not characterized by tenderness on pressure, or only a circumscribed tenderness limited to certain lines and points, makes a pretty clear distinction: Again, neuralgia proper is usually markedly intermittent, while the former affection is as invariably continuous.

These considerations justify us, we think, in separating myalgia or muscular rheumatism so called, from neuralgia, as well as articular rheumatism.

The beneficial effect of the blister applied over the spinal-column, was very striking in the case we have just reported, "the hour the blister drew the pain ceased," was the expression of the patient, and since her sufferings had been of continuous duration for more than a fortnight previous to the application of the remedy, we can almost with a certainty, assume the relief not only to have been a coincidence, but a consequence of the therapeutic administration. Both of the authorities just mentioned recommend blistering, over the direct seat of muscular pain, but neither of them say anything about blisters to the spine. While unwilling to draw a general conclusion from a single case, yet the result in this instance encourages us to a repetition of the trial in future instances, and especially in those cases of chronic lumbago, torticollis and scapulodynia, which from their obstinacy are sometimes so trying to the patience of the physician, as well as the endurance of the sufferer.

DANVILLE, Ky., Mar. 5, 1870.

*Art. II.—Microscopy on the Screen.*

By EDWARD RIVES, M. D., Prof. of Physiology in the Medical College of Ohio.

I desire to call the attention of the profession to a method of studying and teaching microscopy, which, with the valuable assistance of my friend, Mr. Henry Richmann, I brought to the notice of my colleagues in the Ohio Medical College, and exhibited to a portion of the class in the month of November, 1869.

It consists in throwing the object magnified by whatever power we wish to use upon a screen so that it may be seen by, and demonstrated to, a number of persons at once.

I need not refer to the great advantages which this method of studying microscopic objects possesses; they will readily occur to all.

Although many improvements in the structure of the apparatus now in my possession, are suggested to my mind, it is nevertheless perfect enough to enable me to throw microscopic objects upon the screen, with a sharpness of outline and accuracy of detail, not exceeded by any other method, and to enlarge the object far more than can be accomplished with the same power in the ordinary way.

For example: with a power of 250 diameters, by removing the screen 20 feet from the instrument, the object will be enlarged more than 1,500 diameters.

The apparatus consists of a microscope (without the eye-piece) secured horizontally, a plano-convex lens, placed at its proper focal distance from the object glass, and a reflector, all arranged in a linear manner in the order in which I have described them, and secured to a firm base.

As yet, I have only used sunlight (and this is best), but I have no doubt whatever, that the calcium light would give very satisfactory results.

Mr. Richmann is now constructing an apparatus which will be adapted to sun and artificial light, and which will be much more perfect in all its appointments than the instruments we have heretofore used. Probably before this article meets the eye of the reader, Mr. Richmann will have it in operation.

It is safe to predict, that the day is near, when it will be as



common to demonstrate microscopic objects upon the screen to a number of persons at once, as it is now to illustrate such objects by enlarged but imperfect diagrams.

The importance of such a consummation can not be over estimated when we consider that what we see is a small portion of existence, that the wonders which we do not see with our unaided eyes are as a sealed book to all but those who are able to own and *know how to use* a microscope; these are comparatively few.

When we think of the greatness of little things, if I may be allowed to use such a paradox, what wonderful power exists in a germ cell, invisible at first to the unaided eye, but which grows and develops into a being perhaps like ourselves; when we consider, I repeat, these marvelous but unseen agents ever operating around us, it behooves all of us to enlarge our opportunities for understanding more of this unseen world, and to increase by every facility which we can devise, a popular taste for, and knowledge of the great unseen, but no less material world, than that of which our unaided senses assure us.

This motive has induced me to call the attention of the profession at large to a mode of investigating microscopic objects which Dr. Lionel S. Beale says has not heretofore been accomplished. On page 276 of his last edition of *How to work the Microscope*, under the head of "Photographs of Microscopic Objects for the Magic Lantern;" the following language is used, viz:

"Although no means are yet known by which a minute object magnified by the higher powers of the microscope can be thrown upon the screen so as to be seen by a number of persons at once, *almost* the same result has been obtained by magnifying a photograph of the object in an oxy-hydrogen magic lantern."

It will be observed that Dr. B. distinctly avers, in the above sentence, the failure heretofore to accomplish what he and every one must consider so desirable. While photographs of microscopic objects have been magnified and thrown upon a screen by means of the oxy-hydrogen *magic lantern*, this is by no means so perfect as throwing the object, by means of the *microscope*, upon the screen. Besides, the former involves the double process of photography and subsequent demonstration on the screen.

In conclusion I will state that for many purposes I have found the method herein indicated superior to any other, and for teaching microscopy, or rather demonstrating objects revealed by this instrument, the value of it is incalculable.

In investigations of the capillary circulation, I much prefer this mode of examination to any other. Indeed, as often as it has been my privilege to witness the wonderfully beautiful phenomena exhibited by the capillary circulation, I have never seen any exhibition of the kind so perfect and satisfactory as this method affords.

Further details would scarcely accord with my present purpose as my chief object is merely, now, to call attention to what, in my judgment, is an important step in microscopy. Aided by the great mechanical skill of Mr. Richmann and his untiring zeal in the pursuit of scientific subjects, I have been enabled to bring this matter before the profession.

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*Art. III.—The Case of Wm. J. Wade.*

*Phlegmonous Pharyngitis; Œdema of the Glottis; Sudden Death.*

By ROBERTS BARTHOLOW, M. D.

Read before the Academy of Medicine, Mar. 28, 1870.

Mr. Wade was about 23 years of age. Of his personal history and habits I know nothing more than that he had had trouble in his throat at various times; that both tonsils had been excised, and that he had, also, suffered with a chronic affection of the nasal mucous membrane (chronic rhinitis).

I visited him for the first time, on the afternoon of the 15th inst. (March.) He had then been confined to his room for three days, with an affection of the throat. His condition was as follows:

He was sitting upright in bed, supporting his head upon his left hand. The left eye was deeply injected and the lids partly closed to exclude the light. The left auditory canal was stuffed with cotton. In answer to my inquiries he spoke with great difficulty in a nasal and rather hoarse tone. He informed me that he had not slept for two nights in consequence of intense pain in his throat, face, ear, eye, and head. Swallowing was very painful and very difficult. His face and head were hot; pulse a little accelerated; breathing not much embarrassed. He was constantly engaged in freeing his throat of a thick, tenacious mucus, which rapidly accumulated. Without doing so respiration became much obstructed.

On examining his throat I found the mucous membrane of the fauces of a dusky red hue; both tonsils were enlarged; the left tonsil was, however, much the larger and extended across the median line, encroaching upon its fellow of the other side. The soft palate and the pendulum were swollen and pushed forward, especially by the left tonsil. Passing my finger into the throat, I came upon a large, perfectly hard, and very painful swelling, which extended upward and downward as far as I could reach. The epiglottis which I could feel at the base of the tongue, was erect and considerably swollen.

Besides being of a dusky hue, the mucous membrane of the fauces had a generally swollen and sodden appearance. There were no diphtheritic patches on any part of the throat. Some tumefaction existed under the angle of the jaw, on both sides, but was more marked on the left.

In consequence of the extreme pain and difficulty which attended the act of swallowing, Mr. Wade had taken very little food for two days. He also avoided speaking, and communicated with his friends by writing.

After careful consideration of all the symptoms, I concluded that the case was not diphtheria, but a phlegmonous inflammation of the fauces—quinsy in common language, but in the most serious form. I advised the following treatment:

To take milk and egg-nogg freely. To hold ice in the mouth, as far as practicable, in contact with the inflamed parts. To have applied a cold wet pack to the neck. I prescribed for internal use a mixture containing 20 grains of the bromide of ammonium to the dose, which was to be taken every two hours. To relieve the neuralgia of the 5th—the hemicrania—I administered a hypodermic injection of morphia and atropia,  $\frac{1}{8}$  of a grain of the former,  $\frac{1}{128}$  of a grain of the latter.

On the following morning (the 16th), I received another message from Mr. Wade. I found him in the same condition as the previous evening. The hypodermic injection had not quieted his pains; he had not slept; the difficulty in swallowing had continued.

I advised that the same treatment be pursued faithfully. At 5 p. m. I again saw Mr. Wade. He then appeared somewhat more comfortable, but he complained bitterly of the *tic douloureux*, the excessive difficulty in swallowing, and of a sense of suffocation. He was constantly engaged at this time in dislodging the tenacious



mucus, which collected rapidly in his throat. On examining his fauces, I found that the swelling of the right tonsil had receded somewhat, and there was consequently a little more space. I had determined, should there be no diminution of the infiltration, to incise freely the tonsils and epiglottis, but there seemed at this time to be no decided necessity for this severe and alarming measure, and I hence postponed it until morning. Mr. Wade now insisted upon some relief to his pain. He declared that he could not exist through another night without sleep. I then administered, by hypodermic injection,  $\frac{1}{4}$  of a grain of morphia, and  $\frac{1}{96}$  of a grain of atropia. I also wrote a prescription for two doses of chloral hydrate, of 15 grains each, which I directed to be sent for, should the injection fail to relieve him. I however, expressly informed his friends present, that the injection would in all probability be quite sufficient to relieve his pain and procure some sleep, and that the relief to the pain would continue about twelve hours. Should the relief be as decided as I anticipated, the chloral was not to be administered.

At 6 o'clock, Mr. Wade ate some ice cream. He soon after fell asleep, and continued to sleep quietly until 8 $\frac{1}{2}$  P. M. when he awoke spontaneously. At this time, he remarked to his wife, who had been unremitting in her attention day and night, and who was consequently much exhausted, that she had better retire; that his pain was relieved, and that he felt he would have a comfortable night.

Mrs. Wade retired soon after, laying down upon the bed by his side. Before falling asleep, probably about 9 P. M., she observed that his respiration had a peculiar character—crowing, or snoring—but as he had always snored, in consequence of the chronic affection of the fauces, with which he was afflicted, she thought it not singular. At 11 P. M. she awoke with an indefinable fear and found that her husband had expired. Her awakening was immediately subsequent to the sudden cessation of this loud, crowing respiration. It was the sudden silence undoubtedly that awakened her.

I was immediately sent for, as also Dr. Norton, who pronounced the patient dead. On my arrival, his skin was warm and dry; pupils dilated. I at once applied the test—atropia to the eye—for those cases of suspended animation in which respiration and circulation have ceased, without life being entirely extinct, and thought I perceived some dilatation of the pupil take place. I then tried artificial respiration, but without avail.

Such is a history of one of those cases, for the unfortunate termination of which, the physician is so frequently blamed. On the one hand, the measures which he has applied for the relief of his patient, are considered improper or inadequate; on the other he is charged with neglect of means which might have achieved a different result. The case is one, in itself, of considerable interest. Diphtheritic inflammation of the larynx, membranous croup, œdema of the glottis, are among the most hopeless and difficult which we are called upon to treat. Who among us has not had to look on with utter helplessness as our patients afflicted with these lesions, have struggled in vain for breath, as the inexorable disease closed up the avenue to the lungs?

From all points of view, then, must this case of Mr. Wade possess for every physician a real and abiding interest.

It is evident, I think, that Mr. Wade had a phlegmonous inflammation of the fauces, which involved the tonsils, the adjacent areolar tissue, the soft palate, the epiglottis, and the superior vocal cords. An œdematous state of the aryteno-epiglottidean folds ensued, constituting that condition known as *œdema of the glottis*.

The mode of death was by *apnœa*, a considerable increase in the effusion suddenly taking place while he was asleep.

This affection should not be confounded with diphtheritic inflammation of the fauces. Even Bretonneau\* recognizes phlegmonous inflammation of the fauces as a malady quite distinct from diphtheria.

In the convalescent stage of scarlet fever, in erysipelas of the head, in typhoid fever, in various acute and some chronic affections, life is sometimes suddenly and unexpectedly terminated by œdema of the glottis. This is so well understood, I need bring forward no proofs in support of the statement.

Edema of the glottis is also a source of danger in phlegmonous inflammation of the fauces, and although not a common accident, does occasionally occur, causing death by *apnœa*. This statement I propose to substantiate, by reference to the experience of German, French, English, and American authorities.

Trousseau,† the distinguished French clinician, has clearly set forth the nature of this affection which he has named "œdematous

\* *Des Inflammations Speciales du Tissue Muqueux et en particulier, de la Diphtherite, etc.* Paris, 1826, p. 249.

† *Clinique Medicale de l'Hotel Dieu.* Bailliere, Paris, 1865.

laryngeal angina." "It may be," he says, "primitive or consecutive; primitive when it results from an inflammatory movement toward the larynx or pharynx, and simultaneously on the aryteno-epiglottic ligaments." (Vol. 1, p. 534.) "Thus (p. 535), catarrhal pharyngitis may be a cause of œdematous laryngitis. \* \* In a general way all inflammations of the pharynx or throat, whatever their nature or seat may cause this affection. A phlegmonous angina, a phlegmon of the base of the tongue, an inflammation determined by the presence of a cancerous tumor of the tongue, may cause in some cases, œdema of the glottis, when the inflammatory effusion extends to the epiglottis, and to the aryteno-epiglottic ligaments." The description of Trousseau accurately represents Mr. Wade's malady.

An equally eminent, and a contemporary German author, Niemeyer, the Professor of Medicine in the University of Tübingen, makes a similar statement. "Lastly, in occasional cases," says Niemeyer\* "a severe angina, an extensive inflammation of the submucous tissue of the fauces, and, also, facial erysipelas, may endanger life by causing an œdema of the glottis."

Sir Thomas Watson, the great English physician, is not less emphatic on this point. "It should be borne in mind," he says, "that cynanche tonsillaris, does, sometimes, by extension of the inflammation to the neighboring parts, superinduce that very formidable species of cynanche of which I am soon to speak, the *cynanche laryngea*."

Among the most important contributions to our knowledge on the subject of œdema of the glottis, are the papers of Dr. Gurdon Buck,† of New York. Dr. Buck especially calls attention to the condition of the epiglottis, as an evidence of œdema of the aryteno-epiglottidean folds. He considers "swelling of the epiglottis" as "pathognomonic." This was a marked feature in Mr. Wade's case.

Although œdema of the glottis may, and does supervene, upon phlegmonous inflammation of the fauces, it can not be considered a common or ordinary accident. Thus the large experience of Prof. Austin Flint, Sr., of New York, has supplied him with but a single instance.‡ During a course of rather extensive pathological obser-

\* *Lehrbuch der speciellen Pathologie und Therapie*. Erster Band, Berlin 1868. Capital VIII, p. 52.

† *Transactions of the American Medical Association*, vols. 1 and 4.

‡ *Practice of Medicine*, p. 335.



vation, I have seen in the dead-house two instances of this affection, death having suddenly and unexpectedly ensued in both. If œdema of the glottis, usually or even frequently occurred in these cases, phlegmonous inflammation of the fauces would assume a very different importance, and our remedial measures would take a new direction.

Having thus set forth the nature of Mr. Wade's malady, the question remaining for consideration is—Was the treatment pursued adequate or proper? Were there any errors of omission or commission in the therapeutical management of the case?

The means employed were local and systemic.

The local means consisted in the application of cold externally and ice to the fauces. He was directed to keep the ice, as constantly as possible, in his mouth, permitting it to remain in contact with the affected parts. By the physicians of Germany, this plan of using ice is now largely employed in such affections of the throat as phlegmonous angina, diphtherite, croup, and laryngitis. "The effects of ice slowly dissolved in the fauces, are most advantageous," says Niemeyer. "I have seen," he continues, "one of my colleagues recover by the use of this means, when he was so near suffocation that we thought tracheotomy could hardly be avoided." Scarification of the inflamed parts, and especially of the aryteno-epiglottidean folds, is strongly urged by Dr. Gurdon Buck. I had resolved to make free scarifications on the evening of the 16th, but at my visit at 5 o'clock, there appeared to be somewhat more space for the entrance of air than had previously existed. At no time was there any sense of fluctuation, but the swelling continued hard and brawny. The incisions, hence, would have had two objects: to procure free bleeding, and to permit escape of serum from the swollen submucous tissue. Although there were such indications on the evening of the 16th, of œdema of the glottis as swelling of the epiglottis and a feeling of suffocation, the distress was not sufficient to warrant any extreme measures, and I would not have been supported, had I proposed them.

When Mr. Wade manifested a disposition to sleep, he should have been carefully watched, and when the peculiar crowing inspiration characteristic of extreme *œdema glottidis* came on, I should at once have been summoned. It is in this condition of things that the prompt performance of tracheotomy will sometimes save life. In the chapter from which I have already quoted, Niemeyer indicates, that when the symptoms of carbonic acid poisoning arise

and stupor comes on, the operation of tracheotomy should no longer be deferred. In this country we rarely succeed in procuring consent to this apparently formidable operation until the case is hopeless.

Of the systemic means of treatment I relied much on the bromide of ammonium. It was Dr. Gibb, of London, who first called attention to the action of this agent as an anesthetic to the throat. This effect has since been shown to be due to the fact that the mucous membrane of the fauces is one of the points of elimination of the bromides. Starting from this physiological fact, I have used the bromide of ammonium with great success in certain affections of the throat. There is no remedy which has appeared to me to be so effective as this in acute tonsilitis, phlegmonous pharyngitis, and diphtheria. Accordingly, in my prize essay on the bromides,\* I have urged the free use of this agent in these affections.

In addition to these means, I used the hypodermic injection of morphia and atropia, to which I am told, the death of my patient has been attributed. Such a charge as this is hardly worthy of serious refutation, but as the questions involved are of practical importance, it may be worth while to enter into some details in regard to them. In the first place the quantity injected was insufficient to produce decided narcotism; in the second place, the history shows that after two hours of sleep, the patient awoke spontaneously, a fact irreconcilable with the supposition of a fatal morphia narcosis. Moreover, I employed a mixed solution of morphia and atropia in proportions to antagonize the toxic action of each. It is now almost universally admitted that these agents are physiologically antagonistic, and that one may be used against the poisoning symptoms produced by the other. Indeed, cases have occurred in this city, and have been reported in this society, in which toxæmia, caused by one of these agents, has been relieved by the use of the other. I have always enjoined† and practiced the simultaneous use of these agents for the reason that not only is the subcutaneous injection thereby rendered safe, but the curative power is increased.

My reasons for administering the hypodermic injection were

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\*Fiske Fund Prize Essay for 1869.

† See on this point the chapter on "Morphia and Atropia," in my work *Manual of Hypodermic Medication*, Philadelphia, J. B. Lippincott & Co., 1869, p. 89, *et seq.* Also, my Prize Essay on Atropia, *Transactions of the American Medical Association for 1869*.

these: The patient suffered acute pain, and needed rest; the difficulty of swallowing was so great it was unwise to add anything more to the material he was already taking; a viscid secretion continually formed in his throat, greatly obstructing respiration. I need not say to so intelligent a body of medical men, that these were sufficient reasons for administering the hypodermic injection—especially the last mentioned reason—for the power of morphia and atropia to arrest secretion of the larynx and fauces, is a fact beyond question.

Mr. Wade really manifested little physiological susceptibility to the action of morphia and atropia. The first injection on the evening of the 15th produced no appreciable effect. After receiving the second injection of  $\frac{1}{4}$ th of a grain of morphia and  $\frac{1}{96}$ th of atropia about 5 o'clock on the evening of the 16th, he remained awake one hour; then slept two hours and a half, when he awoke spontaneously, and had a conversation with his wife. At this time, the effect of the injection, never very decided, must have begun to decline. Referring to my observations made on Dr. De Courcey,\* it will be seen that the maximum effect of the morphia and atropia injection is attained in an hour and a half, and at the end of three and a half hours begins to decline. The physiological effects, as carefully observed and recorded in the case of Dr. De Courcey, correspond to the history of the action in the case of Mr. Wade.

The lesson to be drawn from my experiences in this case is this: It is impolitic to use a hypodermic injection in a disease which is likely suddenly to grow worse or prove fatal. The progress and results of the disease will be attributed to the injection, and the physician be accused of being, in the language of the Duchess of Somerset, "a hypocritical murderer."

The eminent Dr. C. J. B. Williams, well known in this country as the author of a work on the diseases of the chest, and physician to the Brompton hospital, was but a few months ago in attendance upon Earl St. Maur, the eldest son of the Duke of Somerset. The earl was suffering under an attack of *laryngitis*. Dr. Williams, to avert sudden death in an attack of spasm of the larynx, had performed, by Mr. T. Holmes, the operation of tracheotomy. As his patient died, the doctor became "a hypocritical murderer;" if the earl had survived and recovered, the Duchess of Somerset would have filled London with praises of Dr. Williams' skill. Not

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† See Diagram in my *Manual of Hypodermic Medication*, opposite p. 92.



willing to rest under the imputations thus cast upon him, Dr. Williams brought suit for defamation of character. I observe in a late number of the *Medical Times and Gazette*, that apologies have been tendered and received, and the suit withdrawn. No instance could be more striking than this, of how the wisest and best directed skill may be powerless to save life, and how the anxious and hard-worked doctor is held responsible, not only for the incompleteness of medical science, but for the very failures of Nature herself.

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***Art. IV.--Report of a Discussion upon Hospitalism and Zymotic Diseases as more especially Illustrated by Puerperal Fever or Metria.***

Abridged from the authorized Report.

By AND. C. KEMPER, A. M., M. D., Cincinnati.

This discussion, in which all the speeches were fully written out and read, took place before the Obstetrical Society of Dublin, Ireland, an association instituted in 1839, in the Rotunda hospital, chiefly through the efforts of Dr. Evory Kennedy. The debate occupied ten sessions of the society, and was participated in by the most eminent men of Dublin.

Few men have been more highly esteemed or more venerated in Dublin, than Dr. Evory Kennedy. The Irish have given lavish expression of their feelings toward him, by the degrees of their schools and the distinctions of their societies conferred upon him, while he is not without Scotch, English, and continental recognitions of a long life well spent. He has made obstetricy a specialty. He served eleven years in the Rotunda Lying-in hospital, one year, 1826, as a student to get the hospital diploma to qualify him to compete for an assistancy, three years as assistant master to make him eligible to be a candidate for the mastership, and seven years as master of the hospital.

In 1837, while master of the hospital, he induced the governors to allow him to open the ward and to establish the dispensary in the hospital for the treatment of the diseases of females. At his request, also, the master of the Rotunda was directed to provide attendance for all poor lying-in women at their homes, when re-

quested, and keep a registry of such cases. By virtue of the contribution of a certain amount annually to the support of the hospital he is one of its governors.

On the 28th of October, 1867, in a letter to the governors, and in person before them at their annual meeting in the following November, he proposed certain changes in the plan of the hospital. Excepting that at Vienna, there is no other lying-in hospital larger than the Rotunda. The building, though old, is very well constructed and stands upon one end of a "square," three hundred by four hundred feet, owned and used by the hospital as a park. Dr. Kennedy's proposition was briefly this: that in this park 30 cottages 25 by 15, with avenues 20 feet wide intervening, be built; that these be fitted with three beds each; never having more than one nurse and two patients under each roof; these isolated cottage hospitals for the labor patients; converting the present hospital into an institution for the diseases of females, with the power of admitting children. This same idea of isolated cottages he recommended when consulted by some American gentlemen nearly thirty years ago. With heroic advocacy of strong convictions, he followed up his letter to, and efforts with the governors by reading before the Obstetrical Society in the April of the last year his paper with the title expressed in the caption of this article.

In that paper he says: In treating of zymotic diseases, especially puerperal fever, with which opportunities have made me but too conversant, I shall investigate their true nature, their characteristic features, and the laws which regulate their production; principally their prevention; some hints of their treatment.

Puerperal fever is, par excellence, a zymotic disease.

Are we to ascribe zymotic poisons to a common principle modified by variations of condition? The idea of a common poisonous principle, or miasm, is largely confirmed by the frequency of these diseases at the same time; their being traceable to the same sources; the occurrence of metria in hospital after other zymotic diseases, as typhus, scarlatina, or erysipelas; the principle of isomerism, should it come to be established, would lessen the difficulties of adopting the idea of a common morbid poison; and the idea is not unreasonable.

The greatest virulence and most concentrated fatality of puerperal fever is seen in crowded hospitals. The disease is also seen in the hovels of the poor, and in the chambers of the rich. When

epidemic it shows itself first in our great maternity hospitals, not confining itself to them; like typhus, cholera, scarlatina, and erysipelas, it is endemic and contagious. We have proof that it derives its origin from some local cause and not from anything in the atmosphere, and equally strong proof of its prevalence and fatality in the houses of the affluent. Its local cause is more nearly a constant quantity in the crowded lying-in hospital; it is an occasional quantity in the houses of the affluent; in certain states of the atmosphere these constant or occasional quantities become more operative or active; puerperal fever is produced by a poison emanating from parturient women; the poison is more active in proportion to the concentration of their excretions or exhalations; and in proportion to their number cohabiting in a given number of feet of atmospheric space; but not requiring more than one parturient female to generate it; she herself may reabsorb into her own system the poison she herself has generated and be as certainly cut down as if a crowded, ill-ventilated lying-in ward was the generating medium.

The most striking parallel of the generation and development of diseases, under similar conditions, are the jail fever, now rare; erysipelas in surgical wards; cholera in camps, etc.; tuberculosis among the crowded poor work-people in Paris, and among apes in menageries; glanders among horses; pyemia, hospital gangrene.

In the treatment of metria, the lancet is rarely admissible; local depletion must be our sheet-anchor. The secret of success is to reduce the pain by repetition of leeching before reaction has had time to establish itself; see the patient every six hours; if the first leeching has not made pressure bearable and relieved pain, apply more leeches before reaction is established, and so on, as long as the pulse will indicate the propriety of abstracting blood, making the interval between the leechings longer as the necessity for them diminishes, or the circulation less indicates their propriety; do not, after subduing the acute symptoms by prompt and energetic treatment, allow the inflammation again to creep on to a fatal issue.

There is no doubt of the efficacy of mercury if you can produce its specific effects; in the worst cases there is not time for this, and the system seems to be insusceptible. When metria was to be anticipated from manual interference, or other causes, my habit has been to commence at once after the labor was completed, with small and frequent doses of mercury, or even in more suspi-



cious cases, the ointment ; without disturbing the patient's system to any serious extent, in 48 or 56 hours produce a slight mercurialization ; then should metria or inflammatory symptoms show themselves, press the mercury, bringing the system speedily under its specific influence, and thus easily check the disease, if it had not already been prevented. Only once or twice have I seen metria prove fatal after mercurialization, and then the action of the drug was incomplete. I have often seen mercury fail of the slightest approach to its specific effects. I will mention one exceptional case ; a woman came into the hospital under the influence of mercury taken as a "sweetener," had metria on the third day and died ; whether this was due to the fact that speedy pyalism is not always a proof of constitutional mercurialization or the failure of the prophylactic, my hearers must judge.

Supporting the strength and the circulation by easily and rapidly assimilated food is just as essential as relieving local inflammation, indeed, in true metria, or well marked zymotic puerperal fever, it is much the most important. Zymotic metria, especially in hospital, is a poison fever ; no matter how severe the local distress it is essentially a disease of debility passing into collapse ; however depleting our treatment may be to restrain local distress and lesions, we must steadily regard and provide for the collapse and the sinking from exhaustion. Broths, jellies, milk, and farinaceous food should be given as freely as the stomach will retain them. The same may be said of stimulants, but they require more judgment, and must be given as their effects are observed to be satisfactory, altogether, perhaps they are delayed too long and given too sparingly. In one form of the disease where marked collapse and exhaustion with tympanitis are early, exaggerated symptoms from the commencement, countenance sunken, pulse small, rapid and compressible, where the intensity of the poisoning and the inflammatory lesions bear no relative proportion, or rather are found to be in an inverse ratio, stimulants can not be commenced too early or administered too freely ; and with this form turpentine best agrees.

Of the varieties of metria I shall speak first of traumatic metria, occurring as the result of operations, injuries or lesions of any kind during the delivery. Where zymotic metria prevails, these causes, ordinarily giving so little inconvenience, doom the patient to alarming if not fatal illness. The forceps, the crotchet, rupture of the perineum, abrasions, slight lacerations, or injuries of the

vagina, venesection, are followed by metria, under such circumstances often of the most indomitable character. The air of the maternity is charged with a poison somewhat similar to what we observe in our surgical and military hospitals. In this way erysipelas, pyemia, arthritis, diffuse inflammation, phagedena or hospital gangrene, run their course exactly as in the operation wards of our surgical institutions.

In arthritic metria the joints are generally secondarily affected at intervals of days, often of weeks, after the peritonitis or metritis has run its course. On the contrary, in some instances, the joints were the first organs attacked; the knee, the ankle, the wrist, above all and most violent of all, the sacro-illiac synchondrosis assumed in turn the lead as the organ attacked. Sometimes there was erysipelatous inflammation of the buttock. The torture of these cases is always extreme, when the synchondrosis was engaged intolerable. Some of these cases yielded to the prompt and decided application of superficial caustics and escharotics, especially the actual cautery freely used. Bold incisions were tried in some of these cases, by the advice of Abraham Colles, unsatisfactorily; uncontrollable hemorrhage even followed their use. A chronic form of this arthritic inflammation occasionally occurs, like rheumatism, or akin to those obstinate affections of the knee and ankle joint in young girls and boys of the scrofulous diathesis; the best local treatment for which is ice bags, the starch bandage, scoring with solid nitrate of silver repeatedly, with full diet, and tonics, particularly alternations of steel, and the hydriodates and bromides.

The last variation of type is "puerperal purpuric fever." I have elsewhere described it as an endemic disease of peculiar malignity in the Rotunda hospital, in the winter of 1837-8. The symptoms corresponded in their characteristics with the symptoms of the typhus fever of 1867; firstly, those of profound blood poisoning, and secondly, those of cerebro-spinal irritation. Some cases passing into erysipelas, purulent depôts, cellular sloughs of the character of anthrax, and arthritis, show how puerperal fever, like typhus, is ascribable to a poison which vitiates the blood and passes through a series of consecutive states due to what are termed poison depôts in various parts of the body. The dark discolorations of puerperal typhus, purpuric typhus, purpura, and cholera, demand elucidation. The puerperal typhus of the Rotunda hospital in 1837-8, may take its place with the typhus of the spring of 1867, limited

to a small number of cases and attended with cerebro-spinal symptoms, discolorations and collapse.

I have glanced at the principles of this disease, or the laws which observation and comparison satisfy us are those which govern it in its occurrence. I wish it to be understood distinctly that every form of the disease described by me partakes of the zymotic character, is subject to the laws regulating this family of diseases, is capable of extension in the same manner as endemic, epidemic, and contagious disease, but, above all, that it is *preventable*.

Now, as it is impossible to be too explicit on this subject, where so much is at stake, I shall state that while I can not, of course, object to the subdivision of diseases of the same type according to the structure engaged, for the sake of classification, I deem it quite important, for the sake of treatment, but, above all, of prevention, that diseases, especially of the zymotic type, should be so classed and arranged as to identify their common causes, predispositions, origins, treatment, and means of prevention. I mention this because the neglect of this rule renders our treatment empirical, frustrates our elucidation of the principles which develop the disease, prevents its recognition, and perpetuates its ravages.

I shall, therefore, classify the whole family under the head of "Zymotic Metria," in preference to that by which it has been hitherto received, of "puerperal fever;" and under this common head I shall treat, as modifications of the same disease, puerperal fever, metritis, peritonitis, pleuritis, phlebitis, arthritis, pyemia, purpuric or cerebro-spinal metria, traumatic metria, erysipelas, and hospital gangrene.

This I feel fully justified in doing, because I have traced one and all of them to the same contagium; several of them have prevailed in the same patients, and again and again in different patients at the same moment, under my own observation, when the hospital under my care was charged with the same zymotocene, the varieties cropping up in adjoining beds, and referable, as in the traumatic form, to circumstances and causes traceable at the time.

Again, in cases successfully treated, the same treatment has been successful with all, supporting the strength, meeting local inflammation by mercury, local depletion, counter-irritation and turpentine, issues of different kinds, and the decided but judicious use of stimulants.

The task now remains for me to state to what this contagion is



due, or rather upon what combination of circumstances it depends ; and in order to do this I must establish certain propositions :

1. That puerperal metria is due to the absorption of a poison by the parturient female.

2. That this poison may be generated by any parturient female ; and, where the circumstances are favorable to its imbibition, it may be absorbed into the system of the generator or that of any other parturient female exposed to its influence.

3. That the generation and absorption of this contagion is in a direct proportion to the number of parturient females cohabiting in a given number of feet of atmospheric space, at their parturient period, or who breathe the same atmosphere when lying-in.

4. That in lying-in hospitals, where large numbers of patients are delivered under the same roof, this disease finds its habitat, appearing and reappearing at uncertain intervals.

5. That its appearance, although apparently capricious, is not unfrequently traceable to the occurrence of other zymotic diseases, to a general unhealthy state of the hospital, the labors for some time being succeeded by bad recoveries, before the true zymotic metria exhibits itself.

6. That it is produced by contagion, long experience proves, following in the steps of certain practitioners, while others are totally free from it, and that in the same locality.

7. It is endemic, confined in its occurrence to certain localities.

8. It is not only confined in its occurrence to a given hospital, but it is observed to haunt certain wards of the hospital, and this to such a degree that I have been obliged to close up for many months wards in which it established its special habitat.

9. Zymotic metria is not a disease peculiar to parturient women confined in their own houses, occurring comparatively rarely among them.

10. It is, therefore, not a disease observed to prevail in small lying-in hospitals or cottages where only one or two patients cohabit in their lying-in.

11. The just and inevitable conclusion from the foregoing propositions is, that by continuing the system of large lying-in hospitals we are causing the death by zymotic metria of a number of patients for one that would occur under any system that would secure the separation or isolation of women in their confinement.

12. But as hospitals possess advantages facilitating the cure of patients and as schools of instruction, it is quite possible to com-

bine these advantages with those of the separate system by means of grouped but isolated cottage or pavilion hospitals, with only one, or, at most two beds in each isolated room.

13. That consequently, with our present knowledge of puerperal fever, the conclusion is inevitable that the mortality among parturient women would be greatly lessened by an alteration in the construction and arrangement of lying-in hospitals.

The first and second propositions have been sufficiently discussed; now for the third and fourth: In my own private experience, 3,500 deliveries, fatal metria 1 in 1,200. In my hospital experience, 13,157 deliveries, fatal cases of zymotic metria 1 in 112. Of the cases for which I was responsible to God and man about eleven died of those in my charge in hospital, for one in private or in their own homes; and mark me, this was preventable. "The worst cases are admitted into hospital;" I reply that besides those 117 deaths from metria, there were 101 deaths from other causes, in that 13,157, a number amply sufficient to include every casualty and peculiarity to which hospital patients are obnoxious.

The Dublin registration district has a population of 314,409. For the five years 1864-8 inclusive there are registered in the Registrar's office, total births, 43,438; deduct 1 in 60, that is 723 for twins, and we have, total deliveries 42,715; divide this by 373, the total deaths of childbirth, (164) and metria (209), and we have one death in  $114\frac{1}{2}$ . This result, however, includes the deaths by metria in the hospitals as well as generally throughout the city and suburban districts. If we deduct only the deaths in childbirth, 164, this would leave the mortality 1 in 255; but this would be manifestly an objectionable standard of comparison, as a certain proportion of sporadic cases of metria occur throughout the district, and at times it is epidemic. We should be justified, however, in deducting the cases of metria in hospital from the gross number of deaths, and then allowing an equivalent for the average proportion of cases of metria occurring in the district without the hospitals for the five years named.

Outside of the hospitals the proportion by metria was 1 in 457, while in the hospitals it was 1 in 60. Allowing then the equivalent of deaths by metria within the hospitals for that without, one-seventh and one-half a seventh, including extra casualties and difficulties, that would leave it that 6 women died out of every  $7\frac{1}{2}$ , from being delivered within the walls of the hospitals, instead of in their own homes, or properly constructed huts or cottage

hospitals. But if we take the two preceding years, so as to give a seven years' equivalent to my mastership already alluded to, the deaths in the hospitals from metria amount to 1 in 50 for the seven years, from 1862 to 1868 inclusive; and taking it for granted that the deaths from metria bore the above proportion outside the hospitals, then the result would be that in the city of Dublin alone  $7\frac{1}{2}$  women die out of every 9 from being confined in hospitals; in other words, that in all the deaths that have occurred in Dublin for the last seven years, in parturition, out of every 9 deaths  $7\frac{1}{2}$  women have died, who would in all human probability be at this moment alive had they been confined in their own homes, or in isolated cottage hospitals.

The Registrar General's reports for England and Wales, for three years, gives an average of: deaths by metria, 1 in 726 deliveries; by childbirth, 1 in 429; by both causes, 1 in 239. In London, deaths by metria, 1 in 515; by childbirth, 1 in 429; by both causes, 1 in 239.

In twenty-seven cities and towns of England, for the two years, 1862-3, deaths from metria, 1 in 781 deliveries; by childbirth, 1 in 301; by both causes, 1 in 217. The Registrar General of Scotland gives for the year 1861-2, deaths by metria, 1 in 400 deliveries; by childbirth, 1 in 345; by both causes, 1 in 225. In Glasgow, 1 in 227—two-fifths by metria and three-fifths by childbirth. In seven towns of Scotland, 1 death to 170 deliveries, those from metria being one-third less than those from accidents in delivery.

But, it is said, admit the greater mortality from metria in the large lying-in hospitals, the saving of life in the aggregate is best attained in them. Unfortunately, this is not true; for the combined mortality of the Rotunda and Coombe lying-in hospitals for 1864-8 was 1 in 130; that of the Metropolitan district for the same period, 1 in 260; England and Wales for three years, 1 in 306; twenty-seven large towns of England for 1862, 1 in 290, and for 1863, only 1 in 312. In Scotland for 1861-2, the deaths from childbirth, exclusive of metria, were 1 in 345. In the Waterford (Ireland) cottage hospital, exclusive of metria, 1 in 180.



## DEATH RATES OF ROTUNDA LYING-IN HOSPITAL.\*

Year.	No. of Patients.	Deaths.	Deliv-eries.	Year.	No. of Patients.	Deaths.	Deliv-eries.
†	3,975	1	in 88	1804	1,915	1	in 120
1757	55	1	in 55	1805	2,220	1	in 185
1758	454	1	in 50	1806	2,406	1	in 104
1759	406	1	in 110	1807	2,511	1	in 209
1760	556	1	in 139	1808	2,665	1	in 205
1761	521	1	in 52	1809	2,889	1	in 137
1762	533	1	in 88	1810	2,854	1	in 98
1763	488	1	in 54	1811	2,561	1	in 106
1764	588	1	in 49	1812	2,766	1	in 64
1765	533	1	in 88	1813	2,484	1	in 40
1766	681	1	in 227	1814	2,508	1	in 100
1767	664	1	in 60	1815	3,075	1	in 180
1768	655	1	in 41	1816	3,276	1	in 182
1769	642	1	in 80	1817	3,473	1	in 108
1770	670	1	in 80	1818	3,539	1	in 63
1771	695	1	in 139	1819	3,197	1	in 33
1772	704	1	in 176	1820	2,458	1	in 35
1773	694	1	in 52	1821	2,849	1	in 129
1774	681	1	in 32	1822	2,675	1	in 220
1775	728	1	in 145	1823	2,584	1	in 44
1776	802	1	in 114	1824	2,446	1	in 122
1777	835	1	in 119	1825	2,746	1	in 105
1778	927	1	in 92	1826	2,440	1	in 30
1779	1,011	1	in 126	1827	2,550	1	in 77
1780	919	1	in 183	1828	2,856	1	in 66
1781	1,027	1	in 171	1829	2,141	1	in 63
1782	990	1	in 165	1830	2,288	1	in 190
1783	1,167	1	in 77	1831	2,176	1	in 181
1784	1,261	1	in 114	1832	2,242	1	in 187
1785	1,292	1	in 161	1833	2,138	1	in 178
1786	1,351	1	in 170	1834	2,024	1	in 60
1787	1,347	1	in 134	1835	1,902	1	in 56
1788	1,469	1	in 64	1836	1,810	1	in 50
1789	1,435	1	in 57	1837	1,833	1	in 76
1790	1,546	1	in 129	1838	2,126	1	in 47
1791	1,602	1	in 64	1839	1,951	1	in 78
1792	1,631	1	in 163	1840	1,521	1	in 59
1793	1,757	1	in 92	1841	2,025	1	in 88
1794	1,543	1	in 77	1842	2,171	1	in 103
1795	1,503	1	in 214	1843	2,188	1	in 99
1796	1,621	1	in 152	1844	2,176	1	in 155
1797	1,712	1	in 131	1845	1,411	1	in 40
1798	1,604	1	in 200	1846	2,025	1	in 119
1799	1,537	1	in 153	1847	1,703	1	in 36
1800	1,337	1	in 74	1848	1,816	1	in 52
1801	1,725	1	in 57	1849	2,063	1	in 54
1802	1,985	1	in 74	1850	1,980	1	in 132
1803	2,028	1	in 46	1851	2,070	1	in 148

\* Dr. K. claims that this table proves that crowding produces puerperal fever, and that when produced the hospital becomes its habitat.

† Total number admitted from March 15, 1745, to December 8, 1757, when the present building was opened.

Year.	No. of Patients.	Deaths.	Deliv-eries.	Year.	No. of Patients.	Deaths.	Deliv-eries.
1852	1,963	1 in	178	1862	800	1 in	14
1853	1,906	1 in	118	1863	1,228	1 in	38
1854	1,943	1 in	53	1864	1,184	1 in	46
1855	1,060	1 in	30	1865	1,332	1 in	44
1856	1,600	1 in	64	1866	1,074	1 in	27
1857	1,509	1 in	46	1867	1,146	1 in	39
1858	1,084	1 in	36	1868	1,022	1 in	27
1859	1,389	1 in	66				
1860	1,404	1 in	54	113	190,783	1 in	72
1861	1,135	1 in	19				

Compare this death rate of 1 in 72 with our present death rate according to the commissioners' return of 1 in 116, and we find the avoidable, unnecessary loss of life in the difference between 1 in 72 and 1 in 116. But this death rate of 1 in 72 of the Rotunda may lead us into error, because for the last fifteen years it has been 1 in 31½. Fifteen years is surely a sufficient period to test whether an epidemic is temporary or permanent; and we must not conceal the fact that the death rate increases in a fearful ratio.

But the practice of the Rotunda is not the most fatal to be found, on the contrary it was one of the least fatal of the great lying-in hospitals throughout Europe. Their fearful mortality is not due to the want of skill and talent, but to an inherent defect of the gravest character in the system or construction of these institutions, and one that can not be corrected under their present vicious plan. To prove this I give statistics, requesting your attention to the ratable mortality with reference to the number of patients cohabiting: Liverpool, 156 patients, 1 death in 99 deliveries; London hospitals, all, 2,000, 1 in 77½; Coombe, 404 annually, 1 in 72½; several continental hospitals, 14,253, 1 in 56¾; Glasgow, 352, 1 in 54½; Rotunda, 1,334 annually, 1 in 31½; St. Petersburg midwives institution, 1,714 annually, 1 in 26¾; St. Petersburg hospital, 1,715 annually, 1 in 22; Vienna, 4,453 annually, 1 in 25; eleven Paris general hospitals, 4,764, 1 in 18½; Paris, 2,204, 1 in 18½.

Compare these with the following cottage hospitals: New Ross, 30 years, 924, 1 in 185; Waterford, 23 years, 115 annually, 1 in 295; Limerick, 367, 1 in 367.

M. Le Fort sums up Mr. Simon's statistics thus: of 888,312 women confined in hospitals and maternities, 30,594, or 1 in 29; and of 934,781 deliveries in towns, 4,405 died, or 1 in 212. M. Le Fort's three propositions following, ought to be written in gold:

The women who are confined in hospitals and maternities not only die there in much greater numbers, but die in quite unusual proportions compared with those who are confined in their own dwellings. The cause of this frightful mortality must be attributed to puerperal fever, and it is by contagion that this destructive scourge exerts its ravages. It is absolutely necessary to take serious hygienic measures, and if the malady can not be prevented from breaking out, it is, however, possible to impose barriers and to say, "Thou shalt go no further."

Of the fifth proposition it may be said that the occurrence of metria is proverbially capricious, and yet there are precursors that cause a dread of its outbreak. The most important of these is the occurrence of other zymotic disease, either epidemically or in the hospital itself, as erysipelas, scarlatina, but especially typhus fever. Also, bad recoveries after labor, particularly when an operation or manual interference has been necessary, may continue for some time without a death, and unless the warning is heeded the outbreak of metria will speedily follow.

The sixth proposition. I am as sure that metria is contagious as I am that typhus and erysipelas are so; perhaps it is not so much so as scarlatina, measles, or small-pox. The sporadic cases of metria do not prove its non-contagious nature any more than such cases of typhus fever, or erysipelas prove them to be non-contagious. But even to these sporadic cases the contagium may have been carried by the medical attendant or nurse. A gentleman was sent by his government to study under me at the hospital. He was with me during an outbreak of metria when it was necessary to close the hospital and attend patients at their own homes. He did not exercise that virtue which is next to godliness, but he attended twice as many patients as any other student. His pathway through the city was like that of the pale horse in the Apocalypse. I requested him to cease visiting patients, when the proportion of metria cases sensibly diminished. The same has occurred with extensive midwifery practitioners. The disease has haunted some practitioners like their shadow, while the practice of most others in the same district was unattended by it.

But if our views of a common poison be confirmed, many of these sporadic cases will be evidently due to contagion, since little precaution has been taken hitherto in separating parturient females from zymotic diseases, or in going from one to the other, thus possibly carrying the disease. The enormous fatality of the practice



of having lying-in patients in general hospitals, a practice reprehensible in every way, goes some length to prove the true nature of so-called sporadic metria to be contagious. If metria has the relation of effect to cause with other zymotic diseases and crowded hospitals, a more destructive plan can not be adopted than putting parturient females in general, particularly surgical hospitals. In asserting the non-contagious nature of metria, the argument based upon its sporadic nature must yield, if the principle of poisoning, by self-contamination, be admitted. In my own sporadic cases the condition of the patients' chambers assimilated to that of the hospital; not that there was want of cleanliness or neglect in the hospital; but that a loaded state of the atmosphere exists necessarily in a ward more or less crowded with patients. I should place the degree of the contagion of metria in the same category with erysipelas and typhus fever; rather more so than cholera.

Propositions seven and eight are self-evident from what has preceded. It can not be denied that in endemic and epidemic disease, a physical entity or influence is present in the atmosphere, whether of the room, the house, the street, or the district, of a peculiar character, which produces a certain effect or train of symptoms, recognizable by us as ascribable to this endemic or epidemic influence. What this is, has, hitherto, escaped our detection. Just as is the case in whooping cough, measles, cholera, typhus fever, so it is in ague, metria, and influenza; accepting as we may, the three latter as the best types of endemic and epidemic diseases. The fact of its being necessary to breathe the same atmosphere as that breathed by the whooping cough sufferer, and to inhale the inhalations emanating on swampy localities, or to reside in the district visited by an influenza, does not alter the necessity of imbibing into the system, either by respiration or contact, a physical principle which acts as a poison, and, of course, this can not be imbibed unless it exists, consequently it reduces the matter at the last to a poison or influence operating necessarily by contact; and thus most of these modifications must come to be considered as contagious, and due to contagion.

I have known puerperal fever to haunt certain wards. One ward was so subject to the disease, patients in it during the epidemic having been attacked in a proportion so much larger than those in the other wards, that I passed it over in its rota of receiving patients, and kept it empty—paying at the same time every attention to painting the wood-work, whitewashing the walls and ceiling, scouring with chlorate of lime solutions the floors, and washing, with the

utmost assiduity, the bed-clothes, the nurses' wearing apparel, and obliging the nurses, ward-maids and pupils to attend to ablution, a difficult duty I confess—yet, on opening the ward, again and again the disease showed itself, until at last, on one occasion, I shut this ward up for six months.

The same fact is observable in the lurking poison of scarlatina, the most tenacious of all poisons to its habitat. A let furnished house in Mount street on three occasions, the last at an interval of twelve months, had patients coming up from the country attacked in it with scarlatina.

It is notorious that there is a larger proportion of fatal puerperal fever cases than at other times, when bad recoveries occurred in the city and neighborhood ascribable to the epidemic prevalence of the disease. This does not combat the contagious theory, or disprove the greater hospital mortality; it rather confirms both. In fact, the conclusion practically to be drawn from the epidemic tendency is, that the fact of the predisposition existing renders it the more imperative to avoid congregating those liable to zymotic disease, and puerperal fever in particular, as it adds immensely to the likelihood of its occurrence and spread where the two influences co-exist.

Proposition 9. The fact is now firmly established of the security of life of those delivered in their own homes, however humble, as compared with those delivered in large hospitals, and we need not recapitulate.

Proposition 10. Compare the results under a proper system of housing, in nothing else do I call in question the management of the hospitals, with the housing so successfully adopted in the smaller towns of Ireland. The success of this housing depends upon having only one or two patients in the hospital ward at a time, the treatment in all other respects is the same as in the large hospitals. The death rates of the New Ross, Waterford and Limerick lying-in hospitals have been already given.

The remaining propositions are practical deductions. As the accuracy of statistics of patients delivered at their own homes may be questioned, I will compare only the great and small hospitals. Take the death rates of the small hospitals as our standard, the mean of which is 1 in  $282\frac{2}{3}$ . Let it be borne in mind that the only difference between the great and small hospitals is in the congregating large numbers of parturients into the same building in one case and not in the other; and that the increased mortality bears nearly a direct proportion to the increased numbers cohabit-

ing in each building. In the Liverpool hospitals, 2 out of 3 die who should not; in the London hospitals, 3 out of 4; in the Coombe, 3 out of 4; in the Glasgow, 4 out of 5; in the Rotunda, 8 out of 9; in the Midwives, St. Petersburg, 10 out of 11; in the general hospitals of St. Petersburg, 12 out of 13; in the Vienna, 10 out of 11; in the Paris general hospital, 17 out of 18; in the Paris lying-in maternity, 20 out of every 21 died who should not, or in other words, the deaths should be reduced in that maternity to less than one-twenty-first part of their number. Now compare the mean death rate of these eleven large hospitals, 1 in 44, with the mean of the smaller ones, 1 in  $282\frac{2}{3}$ , and we see that of every  $6\frac{2}{3}$  lives that are lost 5 of them ought to be saved. Little do the poor women who flock to these asylums for safety think that by doing so they are taking chances of 3 to 1, much less of 20 to 1, against their lives.

I would that the Midwifery school of Dublin city, as it ever has done, should take the unchallenged lead in this department of medicine, and I claim that the correction of the abuses named in the manner I have suggested, will benefit the medical school of Dublin, and most particularly its Obstetrical branch.

I have now done what I conceive to be my imperative duty, and confidently leave the issue in the hands of a profession which has ever made the public good its first object.

*(To be continued.)*



## Translations.

*Exposition of a New Theory relative to the cause of the Production of the Sounds of the Heart.*

By Dr. PAUL NIEMEYER, of Magdeburgh.

Translated by Dr. T. C. Henry, Cincinnati.

During the period of the prevalence of the doctrines taught by the Wurner school of medicine, the statement was made and disseminated that the sounds of the heart were caused by the friction of the current of the blood against its walls, and by the opening of the valves. This theory is incorrect, and therefore untenable. Skoda says, we do not understand how the friction of the blood alone could account for the production of the sounds; and more especially in the case of smoothly lined aneurismal sacks, the more especially after Chaveau's experiment, which was conducted by using cut rough rings from the carotid artery of a horse, and by which he proved that the current of blood flowed without noise, which is directly opposed to the theory of the Wurner school. It is altogether unnatural, because it is not in accordance with the general law which governs the occurrence of sounds made in tubes, as usually demonstrated, being destitute of friction. From these deductions, caused by undue want of reflection in regard to the mechanical circumstances that exist in pericarditis, where friction sounds are perceptible, owing to double action in the heart, we will venture to say that the friction theory is not to be considered the correct view. Yet in ætheromatous arteries there is no lack of friction sounds. The same laws which govern the vessels of the heart, are applicable to the heart itself. This statement suffices, as the following positive views as to the motive action are subjected to consideration, so much the more as it is not alone by the auscultatory revelations, but also the circulation and the respiration which must be brought under this head. Every sound in a closed tube, answers the purpose of demonstration, whether air or fluid is impelled, originating through welling or waving, and this occurs evidently through oscillation in the more contracted parts

at rest so long as the contents are in motion in an equal degree *en masse*, these wave or undulatory motions take place, during the passage of the fluid a relaxation and partial stoppage occurs.

Let a person take a glass tube, open at one end; in the middle of this tube let there be made a brass plate provided with a little circular opening arranged; let a stream of water into the tube; at once is perceptible a sound occurring in the tube produced by the discharge of the water through the opening above alluded to, and this discharge is observed to take place, not continuously, but with rythmical pauses, in the same mode as the current of smoke in a chimney. These pauses in the running of the stream of water cause an oscillation in the volume of fluid above, effecting a complete evolution in tone through the contracted aperture, somewhat like a whistle put in motion by a current of air. This entire process was effected by Savart. The results of this experiment may serve to apply to the action of the blood in the heart. Take, for example, a stenosis of the mouth of the aorta; we readily can conclude that the blood must undergo some degree of oscillation of its particles just prior to entering the point of aortic constriction. This eventuates in *bruit musculaire*.

From the time of Lænnec to the present day, there have been no less than twenty-nine theories proposed to account for the production of the sounds of the heart. I do not know of any one more apparently reliable, or seemingly correct, than that of Dr. A. T. H. Waters, reported in the *London Lancet* of 1868.

"I will here give his words, specially with regard to the first sounds of the heart. But the theory of the Werner school is certainly contrary to all we know of the phenomena which accompany the passage of liquids through closed tubes, viz: that a sound should be produced."

Dr. Waters based his views relative to the production of the first sounds of the heart on an experiment made by Mr. Brakyn, of London. Previous to this, Dr. Billing, of London, and Mons. Ruanet, of Paris, had defended the valvular theory of the cause of the production of the first sounds of the heart. Mr. Brakyn having obtained an ox heart, a bladder was connected with the left ventricle by means of a flanged tube, with the aorta is connected another bladder, and this latter has a tube passing from it which is connected with a third bladder attached to the left auricle. The second bladder and the third has a metallic portion with a stop-cock in it. This arrangement of bladders and tubes allows of the

passage of currents of air representing a mimic circulation through the left heart. To conduct the experiment, the bladders being inflated and the stop-cock closed, pressure is made on the auricular bladder and the air is injected into the left ventricle and ventricular bladder; the latter is compressed, and the air forced upward produces a closure of the auricular valve and passes into the aorta and the bladder connected with it. This bladder is now suddenly compressed, the sigmoid valves close, and the air is prevented passing back into the ventricle. The phenomena attending these actions, are two sounds: one, when the ventricular systole is imitated and the auricular valve closed, and the other when the elastic reaction of the aorta is imitated and semi-lunar valves closed. Dr. Waters states, he "fully agrees with the observations of Mr. Brakyn. These sounds closely resemble those of the first sounds of the heart, and I believe it to arise from valvular tension. The second sound is proved by Hope's experiments solely to arise from the closure of the semi-lunar valves."

The first, results from the tension of the mitral and tricuspid valves produced by the blood being forcibly propelled against them; the second, to the tension of the semi-lunar valves of the aorta and pulmonary produced at the time of their closure.

It has been proved in the person of Dr. E. Groux, residing at present at Williamsburg, New York (who is now a practising physician there), and whose sternum is but partially developed, that the first sound of the heart is ventricular valvular; the second, arteric valvular; in other words, that the first sound comes from dilation of the auricle by influx of blood from the vena cava; the second, by alteration of the form of the same cavity. This is visible, in the case of Dr. Groux, to the naked eye—"bruit de coulment"—synchronous with the heart's impulse against the walls of the chest.—*American Journal of the Medical Sciences*, January, 1870.

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**The Dissecting Law.** We are indebted to Dr. Brooke for a certified copy of the law as it finally passed our Legislature. On comparison, however, we find no material omission or error in the copy, as published in last month's *Lancet and Observer*, printed from a copy furnished us by Dr. Jenner.

**For Sale.** In a pleasant village within the oil regions, a practice worth \$4,000 a year. Address D. C. G., care of this office.



*Impotence.*

From Benedikt's *Elektrotherapie*, p. 448, *et seq.*

By JAS. T. WHITTAKER.

Impotence is characterized as an incapacity to perform natural coitus in normal frequency.

It is partly a relative expression, since coitus may be effected in only an unnatural manner, or only with certain females, or only under certain psychical conditions and particular excitants which are not simply of psychical nature.

The most usual form of this *first class*, occurs among individuals who are accustomed to practice the act in an unnatural manner, or among masturbators; that is, the excitants in the usual sense cease to be such. So long as there is no impotence in the unnatural manner, and provided there is a proper moral stamen, they are easily amenable to treatment. The cure is simply *coitus naturalis*.

Usually, however, patients only present when spontaneous erections lack in the proper intensity and duration. In this case the physician must not be led away from the proper psychopathic nature of the affection, but must adopt a suitable galvanic treatment. Many sins have been advised and committed by its neglect.

A treatment is often necessary for masturbators even when attempts at onanism induce powerful erections. There may be power enough present for the spinal reflex with debility for the cerebral innervation. For this condition there is no remedy like *coitus naturalis*.

This form of impotence is characterized as a psychophysical lesion, because the *libido sexualis* and the erections are generated in other parts of the nervous system than the normal.

The *second form* possesses the character of an irritable debility. "The spirit is willing but the flesh is weak." This is the form that generally results from excess in *venere* and is usually combined with spermatorrhea. Patients are libidinous but erections are imperfect, and ejaculations *ante introitum vaginae*. This form often ensues upon the first, or as already mentioned after long years of pollutions or excesses. It is particularly the form for electrotherapy. If it does not exist in high degree, the regulation of coitus is often sufficient to awaken self-consciousness and render the act, at least

at longer intervals, possible. In order to establish their condition clearly to my patients, I am accustomed to relate to them the *bon mot* of a *roué*, viz: an old game-cock crows: *Je fais, quand je peux*; a young one: *Je fais, quand je veux*. The youngest impotent of the second form is in the condition of the old game-cock. He must not seek opportunities, but must so arrange it that the opportunities are present when erections *per naturam* occur. As a rule, however, it is best not to lose time with attempts, but to resort at once to therapeutics.

In this form among the transitions to that following may be mentioned cyanosis and coldness of the penis, local anæsthesia, and other changes of the testicles, to which we shall return.

The *third form* of impotence is the proper paralytic form in which the *libido sexualis* is diminished or entirely absent, and the erections in the highest degree pitiful or absolutely null. This form is either the result of one of the others, or is acquired, or is a symptom particularly of spinal or cerebral affections. It is also the definitive stadium in the physiological development of sexual life in age; occurring in many cases most undesirably soon, while here and there it is protracted beyond sixty.

Patients with this form of impotence are exceedingly unhappy, particularly when the impotence is *acquired*. The great null in the *Hosenlatze* exercises upon the general condition, the energy of will and thought, the most depressing influence. Anæsthesia, obtuseness to electrical excitation, cyanosis and coldness of the member, are not unfrequent attendants. The *prognosis* of the first form is dependent above all upon the moral condition of the patient. It is only when disgust at the abuse has attained a high degree, that the patient will abstain; the cure has been mentioned. When debility is present the prognosis is the same as in the other forms, and this is favorable if the patient is still relatively young. The age for the restoration of virility is very variable, but in general it may be stated that a restitution under the circumstances mentioned, may be expected up to forty years. In young individuals the restitution is perfect. I had the greatest difficulty lately, in restraining a patient of twenty years of age, cured of the third form resulting from masturbation, from retrieving time lost in the treatment. Older individuals must exercise discretion even to the proverb of Luther.

The prognosis is gloomier in the third form when the impotence is symptomatic or expressive of senile decrepitude; the treat-

ment is associated with the greatest difficulties, too, when the trouble is congenital and the results are often only temporary. Symptomatic impotence is usually only recognized as such when it occurs in conjunction with other prodromata. I have recently encountered such an instance in a case of dementia in a colleague. It occurs often, also, in *tabes dorsalis*. In these cases the special treatment is only to be introduced after removal or allayment of the original disease. In *tabes* the restitution of potency is often dangerous, as it may cause a serious relapse. I may mention here, that an impotence of the second or third form may occur as a result of venereal excesses, and may remain for several years and then spontaneously disappear. The method of the electrical treatment is essentially the same as for pollutions. When impotence is associated with spermatorrhea the catheter treatment deserves particular regard, and when with anæsthesia and lack of sensibility to electricity, the electrical penciling should be employed. In particularly obstinate cases of the third form, I employed also strong galvanization with the labile current, by placing the copper pole on the cervical vertebræ, and gliding the zinc pole along the spinal column. The condition of the *nutrition of the testicle* merits particular alteration. Sometimes it is not essentially diminished in size though its tissue is very lax, and this alteration is sufficient to cause impotence. I found this condition, for instance, in a man of about forty years, in whom there was also a difficulty in the excretion of urine; galvanization of the testicle soon furnished—*die zufriedenheit seiner jungen gemalin*. Distinct atrophy of the testicle is often present with diminution in size. In such cases galvanization with the stabile (fixed) current is indicated, and I have seen good results from its use.

The condition of the bulb should be noted. I treated one case affected with partial atrophy of the bulb (diagnosed by Privy Councillor Dr. Dumreicher). In consequence of the affection, the penis was bent in erection and turned like a screw, the semen only escaping when collapse occurred. Every attempt to effect emission during the acme was fruitless. Perfect cure resulted from a Faradization of the affected portion. Since this I have often observed analogous cases.

One of the first effects of the galvanic treatment of the second form is a declension in the abnormal *libido*. This terrifies the patient at first but is, nevertheless, a favorable symptom.

We have already spoken of the treatment by the regulation of



coitus when this is sufficient for a cure. I will only add, that the administration of some indifferent drug, with a strong appeal to the psychical nature, will often suffice for the cure of the more or less frequent *fiasco* in coition on account of anxiety or loss of self-confidence. The regulation of coitus is essential also in other forms of the affection. Impotents under treatment are strongly tempted to trials, and the physician is often compelled to permission in relief of the deplorable melancholy. It is essential, however, that the trials only occur when frequent, regular and powerful erections *per naturam* exist. For if the first trial be a failure, self-confidence is lost, and this increases the difficulty for the next trial, and the patient torments himself and his physician all the more.

Above all things, the patient is to be warned against exercising coitus *quasi en passant*. The act is only to be performed at the moment of erection, and this requires some patience on the other side that the ejaculation may occur *intra vaginam*. It is the *emissio ante introitum* that is productive of such evil consequences. In the third form, of course, this is little to be feared.

Usually the interval between introition and emission increases with the number of acts, so that a premature escape rectifies itself on repetition. The duration of the treatment is seldom less than six weeks, daily sessions; sometimes, often, indeed, a longer time is necessary or a resumption at intervals.

The question becomes pertinent here, whether a cured impotent should be advised to marry. Those who have regained virility to such a degree, that excesses; are threatened, should, of course, espouse, as there is certainly no better method of preserving the *beaux restes* than marriage. Those, also, who have acquired a moderate degree of potency, may also meet with medical concession, but they should be particularly cautioned as to the physical temperament of their selection, as a strongly developed sexual impulse pays but little regard to the restraints imposed by religion, or morals, or society's opinion, or even the consequences of excess. Patients should be reminded that most women are but little desirous during the first years of marriage, and that they may easily be maintained at this. It is not to be forgotten that the period of greatest danger is that following the abolition of the vows of abstinence made at the first labor. Further should patients remember, that there is no better method of preserving of female virtue than the maintenance of female modesty. Mar

riage is decidedly to be interdicted to patients whose impotence is a prodrome to tabes or other neurosis. One exception may be made; the impotence which is a symptom of meningitis spinalis may fully disappear after the disappearance of all other symptoms.

The marriage of congenital impotents should be postponed until a long time has demonstrated that the disease is permanently cured. Though a cure is of rare occurrence, there are, nevertheless, instances of complete establishment, *e. g.*: a *studiosus juris* of 23 years, congenitally impotent, occupied his first academic vacation in attempts at cure. Dynamometric trials of every variety, however, were unsuccessful. In the course of last winter he came under treatment. After a few weeks' trial was made; perfect cure was established. *Einige Wochen später kamm er verzweifelt mit der Frage, was er thun solle; er habe ein Mädchen deflorirt, und sie blute schon seit 24 stunden. Ich sagte ihm, er möge sich freuen und sie Einspritzungen in die Vagina machen*

Men have sometimes married who have never experienced *libido*, and yet both *libido* et *potentia* have gradually developed.

With electrotherapy, hydrotherapy plays a most important role. Pollutions and spontaneous spermatorrhea, however, are only aggravated by its use. In spermatorrhea with great *libido* I have often employed the rain douche of moderate temperature and from moderate elevation for its soothing effect. In impotence, especially, of the third form, the cold water cure, particularly the packing treatment and the heavy local douche and the wave bath, furnish the most surprising results.

I am acquainted with a patient who was treated, in early life, with injections of brandy for a gonorrhea, with the result of impotence of the severest grade. Fifteen years of cold pack and 17 galvanic sessions restored him perfectly.

Hot baths and ice baths may relieve sexual debility, but I have never known them to cure a sexual paralysis, unless it was dependent on a meningitis spinalis, when hot baths sometimes accomplish the absorption of exudation. Aphrodisiacs are not even productive of temporary relief and often do serious injury. In genuine impotence, tonics too, are simple playthings, *ut aliquid fiat*.

*Aspermatismus* denotes a lack of semen. In impotence of the third form, there is often no secretion, or rather excretion, more. Powerful erections may occur, coition may be performed with

enormous frequency and yet no seminal ejaculation follow. This condition is often observed in degeneration of both testicles, swelling of both epididymes and bilateral kryptorchismus.

I have once observed aspermatism without any of the above mentioned pathological conditions. It was a prodrome of tabes dorsalis. Those cases are physiologically analogous, where the ejaculation only follows after a number of coitions. Such a condition I have observed in a youth who suffered from pollutions. Mention should here be made of the fact that workers in lead, *e. g.*, type-setters, are unusually often infertile. Whether the trouble is caused by a degeneration of the semen or not, I am unable to state.

**At Last.** The following notice which we clip from one of our city papers, sufficiently explains itself:

"McREYNOLDS—VAN MATRE—On the morning of Tuesday, April 19th, 1870, by the Rev. John H. Elliott, Rector of St. John's, Dr. William H. McReynolds, and Ellen, daughter of the late Daniel and Maria A. Van Matre, all of this city."

Our best wishes and congratulations attend the Doctor and his wife. To other old bachelors we only say, "Go thou and do likewise."

**Personal.** Prof. S. A. Norton, of the Miami Medical College, has gone to Europe to engage in chemical studies. He will be absent a number of months.

Prof. U. E. Foote, of the same college, has accepted a position as Assistant Physician to Longview Lunatic Asylum. This will not interfere with his college duties.

Dr. G. R. Patton will go to Europe in a few weeks to engage in special professional studies.

**Braithwaite's Retrospect.** A friend has the first 34 parts of Braithwaite, handsomely bound in 15 volumes, library style, which he wishes to sell. They will be disposed of at a reasonable discount. Information may be had at this office.

**Married,** March 23d, 1870, by the Rev. J. E. Brant, Dr. Jas. Faubion, of Elkinsville, Ind., to Miss Louisa E. McKnight, of Bedford, Ind.

**Dr. Stone** will issue the first number of his *Minnesota Medical Journal* about June.



## Medical Societies.

### CINCINNATI ACADEMY OF MEDICINE.

WM. CARSON, M. D., PRES'T.

JAS. T. WHITAKER, M. D., SEC'Y.

#### *Remarks on the case reported by Dr. Bartholow.*

##### *Hypodermic Medication.*

[This case is given in full, in Original Communications, of this month.—ED.]

Dr. *Thornton* alluded to what he deemed bad practice, in the administration of opium in certain cases. He thought in the consideration of these topics the Academy should be candid. It speaks to a great degree with authority. It is a sort of court whose decisions are accepted as law by young physicians and country practitioners.

On the last evening a case of phlegmonous pharyngitis and œdema of the larynx was reported. A young man had been sick two days with headache and throat trouble, for which he had been treated with hypodermic injections of narcotics. In two hours after this administration the patient was dead. He looks upon this practice as dangerous. In laryngeal stenosis the blood is already charged with carbonic acid; there is not enough oxygen; morphia adds to the difficulty by interfering with the respiration. It was stated that the patient died of apnœa. Headland says death from opium occurs by apnœa. Now, as many persons are influenced by the proceedings of the Academy, criticisms should be offered in such cases, and no offense should be taken for a careful and candid analysis. It is a duty we owe ourselves and the profession.

Dr. *Bartholow* quite agreed with the gentleman, that any case reported to the Academy should be subjected to discussion. It is proper, however, that the case be correctly stated. In the criticisms upon his own case, the gentleman makes two mistakes; first, that death followed in two hours. Dr. Bartholow then recapitulated the points of the case—showing that death did not occur

until eight hours after the last injection. Second, the gentleman claims that death resulted from opium. The crowing respiration was not significant of any poisoning by morphia, but of œdema of the vocal cords. The maximum effect of a hypodermic injection is reached before three hours, and begins to decline in three and a half hours. In this case the patient awoke spontaneously in three and a half hours after the last injection.

Dr. *Mussey* remarks that he has seen a man demoralized by the use of the hypodermic injection of morphia. It is not safe to administer morphia in this way, day after day.

It is only to be used in dangerous cases; as a general means of medication, it is objectionable. In the case of his own wife, he had administered morphia in this way, day after day; no influence was obtained in gr.  $\frac{1}{3}$  doses. This dose he had repeated in two hours, and again in six. After this he noticed that the face was quiet. She suffered with intermittent fever and difficulty of expression; paralysis of the right side followed; dejections were involuntary. She became totally unable to use her limbs. Ordered wine whey, beef essence and cream. After partial recovery she possessed no recollection of all that had passed. Hammond regards it as a case of embolism of the middle cerebral artery, as aphasia existed. Nestel agrees in this diagnosis. The speaker fears that perhaps he had aggravated the difficulty by the morphia administered. In this his medical friends, however, disagree.

Dr. *Carroll* would differ widely in the treatment of acute inflammation of the pharynx and larynx, with that adopted in the case reported. He would employ purgatives and antiphlogistics. In his estimation the fault was in the general and not in the local treatment. He was in favor of bleeding to syncope, and this repeated, if necessary, until the patient was easier. A case was narrated in which this treatment had been adopted, with calomel, tartar emetic and jalap; the patient recovered. Mention was made of two young ladies similarly affected, who recovered under venesection. He has no particular objection to the hypodermic method, but considers it an awkward manner of administering medicines. It must occasionally be unsafe. A case in Lancaster, treated by hypodermic injections, died in thirty minutes. Mention is made of two cases which had been salivated and treated with ice and cold applications; both died. The idea of applying cold to inflammations and abscesses, is productive of more evil than

good. If ice be applied to an inflamed part, sanious matter is discharged; if warm fomentations be used, the pus will be laudable.

Dr. *Murphy* regards the history of the case under discussion as an exceedingly interesting one, and one that comes near to every busy practitioner. Throat troubles are hereditary and idiopathic. The modern doctrines instruct us that cynanche tonsillaris, etc., never can be cut short. Once in a while when great engorgement exists, with dryness and projection of the tonsil, a resolution may be effected. The tendency is, however, to suppuration. As cold applications do not further this tendency, he is opposed to their employment. Warm applications, fomentations and incisions are preferable. Refers to a case in his own practice, characterized by excruciating pain, where he had aggravated the difficulty of breathing by the administration of morphia. The atropia, in this case, in combination, would tend to increase the dryness of the throat. The speaker inquires if the patient would not have struggled before death, if this termination was due to œdema of the glottis; admitting, however, that his struggles might not have been observed. It is lamentable that a *post mortem* was not obtained. Bleeding to syncope will not jugulate this disease. Trousseau says that an attempt to abbreviate it is wrong. A case is given: A negro man entered the hospital the other day with this disease; pain and swelling existed with mucous expectoration; 30 grs. solution of nitrate of silver was applied, and on the fourth day the man was discharged, well. Heat has the power of averting reaction and soothing pain. The speaker repeats that his remarks are tendered in no spirit of criticism.

Dr. *Richardson* remarked that the criticisms which he proposed to proffer would be urged in a spirit of perfect fairness, as he regretted that so much feeling had already been exhibited. The main point under discussion is clearly what was the cause of death. Dr. Bartholow's theory assumes œdema of the glottis, resulting in apnoea, excluding the morphia as in whole or in part participant. Accepting all the recognized and known facts of the case as presented, is this theory tenable, defensible and consistent? At 5 p. m. morph. gr.  $\frac{1}{4}$ , and atrop. gr. 1-96 were hypodermically injected. At 6 o'clock he partook of ice cream, and soon after fell asleep and slept *quietly* till half-past 8 o'clock. Up to that point of time there was no evidence of obstructive œdema of the glottis, according to the gentleman's own state-



ment, and the paper reads, too, he awoke spontaneously. A little after he fell asleep again. This simple statement excludes glottidean œdema anterior to that time. Further, it is stated that before Mrs. Wade fell asleep she noticed a peculiarity of respiration, namely, a crowing or snoring sound. As he always snored in his sleep, however, she did not regard it singular. Now, Mr. President, we must characterize this *crowing* sound as a total assumption, for, firstly, the gentleman must have depended upon Mrs. Wade's statement alone, as he himself was not present during its occurrence, and had she observed a *crowing* sound she certainly would have regarded it as singular; secondly, the crowing of glottidean œdema differs radically from an ordinary snore; it is stridulous in character. The speaker insists upon this difference being established, as it is the only positive evidence adduced in favor of œdema. There was undoubtedly a sound, more a peculiar sound; it was the sound of a stertorous snore, a snore exaggerated by the profundity of the sleep. How could the gentleman define the sound when Mrs. Wade was asleep, and when there was no possible testimony available?

But again. The difficulty in this discussion seems to be that if one theory can not be established, the other, of necessity, follows; that is, unless he died from œdema glottidis, he died from direct narcotism. That he did not die from narcotism direct, is fully proven by the fact of his two and a half hours' quiet sleep and his spontaneous awakening; that death occurred by œdema of the glottis is entirely unsupported by any fact of the case presented.

There is another point now upon which I would lay particular stress, and that is the described condition of the epiglottis. The gentleman informs us that the epiglottis was erect and swollen to tactile examination. It is extremely doubtful whether the finger could recognize this condition between the swollen tonsils, as their impingement upon the sides of the finger would obtund the sensibility of its pulp. But there is one point that excludes any participation of the epiglottis; it is the absence of that symptom which is regarded as pathognomonic of the disease, namely: when the epiglottis is acutely inflamed and considerably swollen, spasmodic or strangling cough is excited at every attempt to swallow liquids, especially irritating liquids, such as would be 20 grs. of brom. of ammon. in solution, which he was swallowing every two hours. The word cough does not appear in the whole report. There is even more than cough in epiglottidean inflammation,

there is present a sense of suffocation, caused by the impingement of the swollen tonsils on the anterior or upper surface of the epiglottis without causing actual obstruction of respiration.

All the text books mention a difficulty of deglutition in this affection, and all quinzey patients complain of the same, without reference to an acutely inflamed condition of the epiglottis. There is nothing in the history that justifies the diagnosis. There is no evidence of interference with the respiration up to the time of the last sleep he took on earth. The first sleep was undoubtedly from the morphia, because when he awoke he no longer experienced that pain of which he complained so bitterly before the injection of morphia, and thought he would pass a comfortable night. After requesting his wife to retire he soon fell asleep again.

The speaker now proceeded to develop his own view of the case, as follows:

In spite of the theory that morphia and atropia arrest secretion, this rapid formation of viscid secretion persisted in this case in spite of his first injection the evening before, greatly obstructing respiration, and he gives that as one of his reasons for administering his second injection.

We are told that the accumulation of this viscid secretion was so rapid and profuse as to require constant clearing away in relief. The fact that he slept *without snoring* proves that the brain was not obtunded. Of course if this secretion was not being cleared away serious danger to respiration would ensue. He awoke, too, spontaneously. He could not have been narcotized, and yet as he awoke without pain, he must still have been under the influence of morphia. Again he slept, but this time more profoundly than at first, because he snored. The snore, if peculiar in anything, was an exaggerated snore; it was the imitation of stertor, which is but an exaggerated snore. Had it been stridulous it would have been a double sound, that of inspiration being louder than that of expiration, and would of course at once have excited his wife. As it was only a snore, she became easy and slept. Gradually now this secretion continued, gradually it occluded the ever narrowing chink, and gradually the blood became poisoned. From both causes the brain was more and more obtunded, and death supervened.

About 11 P. M. Mrs. Wade awoke with an indefinable fear. The fear was from the death stillness and silence which prevailed. The theory that she was awakened by the sudden cessation of the

sound is not a tenable one. The illustrations adduced are not relevant. Mrs. Wade was familiar with his habit. On this occasion she "did not think it singular." She awoke just as any anxious wife or mother would, and on awaking was seized at once with this indefinable fear.

Again, if sudden effusion had occurred, can it be conceived that no struggle would ensue sufficient to awaken Mrs. Wade. It may be claimed that Mrs. Wade, having lost so much sleep, slept too profoundly to be awakened by his struggles; but, unfortunately, the gentleman's theory of her awakening from the cessation of the noise, attributes to her a most remarkable impressibility, under which the least struggle would have awakened her. Accepting the theory of the accumulation of tenacious mucus with the cerebral obtuseness from the morphia, we possess two elements, either of which alone would have been insufficient to have effected the death which occurred under their conjunction.

The speaker then concludes:

This is then the only tenable theory. It excludes death by direct, absolute narcotism, and rejects death by œdema. The morphia becomes only an indirect agent, and death follows by asphyxia. But it is the danger of asphyxia in these cases which the most recent and intelligent writers urge in contra-indication to opium. This is a case in justification. Death occurs from two causes, either of which alone would have been insufficient. The whole case is simply then a remedy misapplied. If all were arraigned for this cause, who of us might escape?

Dr. *Bartholow* arose. He complimented the gentleman warmly for the manner of his speech, as being utterly free from any of the personalities which had so materially derogated from the strength of the arguments presented by others. He would imitate him in this throughout. The question on his part also would be discussed only in its scientific aspect. The gentleman had made also a strong speech, strong as the prejudice of his position would allow. An effigy had been set up in substitution of the original, and the art of the polemic had been appealed to and exhausted in its sustentation. In developing this he would combat the arguments presented one by one, and then vindicate his own position.

First—then, as to the pathological condition. The gentleman questions the accuracy of a diagnosis by touch. It can only be a question of individual skill. An erect and swollen epiglottis is always palpable to the finger with the *tactus eruditus*, and in this



instance it was clearly recognized. Aside from that, however, the mere existence of double tonsillitis necessarily involves epiglottidean participation. An inflammation of such extent in its immediate vicinity always implicates the epiglottis. There is even more than this in every such case, there is swelling of the false vocal cords. The high authority of Pollock (Holmes' *Surgery*, vol. iv), is cited in support.

Secondly, in reference to the character of the respiration the gentleman is wrong again: he claims that the stridulus is a double sound, and urges this in distinction between it and a snore. All authorities agree that it is inspiration only that is difficult in these cases, inspiration is noisy but expiration is free and noiseless. This is the reason why Mrs. Wade did not "think it strange" but fell asleep without anxiety.

The gentleman claims again that it would have been impossible for death to have occurred by apnœa without a struggle. The speaker then refers to cases from Niemeyer, Trousseau and Pollock in proof that death does occur by apnœa in these cases, and not by asphyxia, and that in some instances consciousness is instantly lost and death as suddenly supervenes.

The gentleman seems to forget the element of spasm that occurs in all these cases whereby respiration is suddenly checked. During his second sleep more effusion occurred, the cords were more swollen and the spasm ensued. Whenever irritation exists at the outlet of an organ spasmodic contraction occurs in its muscles, as in the sphincter ani from intestinal ulcer, or in spasmodic contraction of the muscles of the larynx from aortic aneurism impinging upon the inferior laryngeal nerve. Such a case as just narrated lately occurred in London. Tracheotomy was performed, and all London was agog at the necessity of this operation in aneurism of the aorta.

Attention is called, too, to the ability of swallowing the bromide of ammonium solution without irritation; the gentleman forgets again that this existed while the patient was under the effects of the morphia, which destroyed to some extent the irritability of the epiglottis. After the effects of the narcotic had in a measure subsided then this irritability returned and spasm became possible. The idea that sleep was more profound the second time is utterly at variance with the known action of the drug. The greatest effect of morphia and atrophina, hypodermically administered, occurs in one hour after injection: in  $3\frac{1}{2}$  hours it begins to decline.

The second sleep did not occur until full  $3\frac{1}{2}$  hours had elapsed. Had the "tenacious mucus" continued to accumulate it would have instantly excited the reflex of cough. But it is a well known action of morphia to diminish secretion of all kinds. These two factors form sufficient evidence to overthrow the whole new theory, however plausible it might at first sight have appeared.

The speaker then proceeded to defend his own treatment as follows :

First, regarding the cold applications which have met with condemnation at the hands of some of the speakers. Authorities differ as to the value of heat and cold, most English practitioners preferring heat, most German cold. Niemeyer is cited in proof. Reference is made to Cohnheim's theory of inflammation in indication of the value of cold—to effect the contraction of the blood vessels and prevent the escape of leucocytes. The practice of medicine as far as possible should be rational. The theory of Cohnheim meets with daily substantiation, and it is upon this theory that cold is applied. Clinical experience has amply verified its value.

The bromide of ammonium solution has recently been highly lauded in all cases of this class. The speaker has seen good results in his own practice.

The morphia was given to relieve the intense pain, and there is no gentleman in the room aside from the prejudice of the moment that would not have employed it. Reference is again made to Pollock, loc. cit. p. 74, where he advises morphia in these cases to relieve the pain.

The speaker then returns to the waking of his wife by the sudden silence, and coincides with the gentleman that she was accustomed to his habit. That is the very reason why its cessation would awaken her. This is illustrated by the story of the sick miller who was unable to sleep until his mill had been set in motion.

The speaker then sums up as follows :

The interval between the injection and the death entirely precludes death by narcotism. The recurrence of the snore rejects any participation whatever of the action of the drug, because he snored when totally from under its influence: it was his habit in health. The constantly diminishing action of the drug shuts out the theory of the accumulation of mucus, because he would instantly have been awakened by reflex excitation. The history

and the symptoms leave no other inference than death by apnœa from glottidean œdema.

The speaker then concluded with a reflection upon those gentlemen who had not hesitated to bring before the Academy certain rumors and reports which he utterly disdained to answer.

#### CASES.

Dr. *Mussey* reported the following cases :

The Doctor presented several specimens of cystic calculus. The smaller one from a girl, 4 years of age, who had suffered with urinary difficulty for  $2\frac{1}{2}$  years. It was removed by lithotrity. She had been taking buchu. The debris of the stone weighs 85 grs.; it measured in all  $1\frac{1}{8}$  inches in one diameter;  $\frac{3}{4}$  inches in another. It was removed in one session. On the following morning she was running about the house, and no difficulty has presented since. Dr. *Mussey* remarked upon the rarity of this affection in females at such an age. He had operated upon a boy of  $2\frac{1}{2}$  years. The second specimen was removed by bilateral lithotomy from a boy 7 years of age; its dimensions are  $1\frac{1}{2}$  inches and 7 inches; its weight 156 grs. The specimen removed from an adult of 22 years weighed 880 grs.; measured  $5\frac{1}{2}$  inches in circumference, and  $1\frac{6}{10}$  in diameter. He had received a letter from this latter patient, day before yesterday: the patient complained of slight irritation of the bladder: with this exception he was doing well. The other cases were likewise successful.

#### CHLORAL.

Dr. *Comegys* has had several fine results with chloral in cases of delirium tremens and chorea; in the latter in conjunction with iron. The first recovery of co-ordinate power was, however, with chloral alone. In an obstinate case of delirium tremens he had administered 60 grs., after a previous dose of 30 grs. Ten hours' sleep followed.

Recently he had encountered a case of labor characterized by a rigid undilated os; the case was a miscarriage at 4th month. The os dilated to about the size of a dime, excruciating pains were complained of, and no sleep had been possible for 48 hours; 15 grs. chloral secured sleep in less than 10 minutes for the space of 2 hours, when the process of dilatation was well advanced.

Dr. *Miles* reported a case of delirium tremens of violent character requiring the assistance of two or three persons to detain



the patient in bed. 30 grs. chloral secured 30 minutes' dozing, and 40 minutes' sound sleep. After taking the remedy the temperature was 100°, the pulse 140. One hour after the temperature was 97°, pulse more natural. Patient arose delirious; 20 grs. more secured 15 hours' sound sleep. On awaking food was taken. At 10 A. M. there was no delirium. Recovery was rapid, no tremor remained, and but little debility.

Dr. *Ludlow* has used chloral in one case of delirium tremens. In July last he was called to see a woman 45 years of age, who had been drinking for 6 or 8 months. She was then in the incipient stage of alcoholism. She was treated with morphia, and bromide of ammonia and potash for 24 hours. She had no sleep for 2 nights before. Beef tea was also ordered. Third night, no sleep. At 4 o'clock on the 4th day she became uncontrollable. Chloral, grs. xxx, ordered at once; shortly after she was drowsy. At the end of  $\frac{1}{2}$  hour, grs. xv more ordered. Slept then till 7 o'clock, when she awoke rational, and without subsultus. Beef tea and a small amount of stimulus ordered. Soon after 9 o'clock she fell asleep. At 4 o'clock, her husband found her on the floor; 10 or 15 minutes after he heard a gurgling noise, and on examination she was dead. No *post mortem* having been held, he was unable to assign a cause.

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#### *Report on the Sulpho-Carbolates.*

By J. S. UNZICKER, M.D., Chairman of the Section on New Remedies and Pharmacy.

In a former report I stated to the Academy that carbolic acid was the best remedy at present known for the cure of scalds and burns, in solution of  $\text{ʒij}$  to the pint of water. Besides this, carbolic acid—or, better, phenol—is being used for many other purposes; and there is no telling what—from the many investigations still going on—its uses may not be in future. Dr. F. Grace Calvert, F. R. S., at a late meeting of the British Pharmaceutic Conference, stated: "That it was impossible for persons to understand enough of this substance unless they were informed as to its qualities. It was a powerful agent for good when applied with skill and knowledge; and it was a dangerous one if used without these guides. It was very desirable that all who had to do with

carbolic acid for medical purposes should understand the great change produced by its admixture with glycerine. It was certain that the union of these two substances was a true chemical combination, by which the activity of the carbolic acid was much modified. Pure carbolic acid is a caustic, but a mixture of equal parts of carbolic acid and glycerine does not possess those qualities. He did not hesitate to say that the internal use of carbolic acid produced a prophylactic effect as regards many diseases, and that he has seen this especially in checking the spread of scarlet fever."

It was also stated by T. A. Readwin, F. G. S., "inasmuch as carbolic acid will destroy the power of *vaccine virus*, it becomes an interesting inquiry as to the possibility of using it internally as a preventive, so as to fortify the human system against the incoming of zymotic diseases."

Different combinations with phynol, called sulpho-carbolates, have of late been introduced, and by some highly recommended for their efficiency as remedial agents. Some fine specimens of the sulpho-carbolate of zinc, soda and iron, made by Mr. E. S. Wayne, pharmaceutical chemist of this city, I take pleasure in exhibiting to you for inspection. Besides these, we have the sulpho-carbolates of lead—lime—quinia—potassium and magnesium.

**SULPHO-CARBOLATE OF ZINC.** The use of this article was first suggested by Dr. Wood, of England. More recently it has been successfully used in the hospitals of the Berlin Charité. It combines the disinfectant and therapeutical virtues of phenol and the astringent action of the zinc sulphate; its preference to either, and especially to phenol or the phenates, is said to depend on the gradual disengagement, and consequently on the more continuous and uniform action of the phenol. The same may hold good with still greater promise for the internal use of this or other sulpho-phenates. (*Am. Jour. Phar.*)

It is readily soluble in water, glycerine and diluted alcohol. As a dressing of wounds and sores, gargles, or any other application in surgery, and as an injection in gonorrhea, it is highly recommended, and used in solution of 3 to 6 grains to the ounce of water. The sulpho-carbolates of potassium, sodium and magnesium have been recommended by Dr. Sansom as antiseptics in cholera and zymotic diseases generally.

It remains to be seen, however, whether these chemical com-

pounds have any advantages in their physiological effects, over the same mixed extemporaneously when prescribed, because they have not been long enough on trial to determine this fact. Then, again, many preparations of this kind are often introduced of an unreliable kind, made designedly *cheap to command the market*—instead for what they should have been intended—the relief of the suffering. It may be found, however, when more is known of these preparations, that their action is milder, and that they produce less of that caustic and irritant effect belonging to phenol alone. Should this be the case after due trial, they will then constitute a very important addition to our materia medica. But we should make sure before prescribing them that the article is genuine. It is very difficult and often impossible to determine and settle these points in private practice, as we can not have patients under our continual observation and control, so necessary to success. Consequently, the hospital practice is best adapted to decide questions of this kind, and determine the real value—if any—of all new remedies. A little emulation displayed in our splendid hospital hereafter, would not only benefit mankind, but would also tend to elevate the standard of our medical institutions, besides bringing about a closer union between these institutions, and more sympathy for them, than is now the case.

May the time soon come when we will read with as great pleasure and interest our own hospital reports, as those of Guy's and other kindred institutions.

In conclusion, permit me to draw your attention again to the importance of the remarks of Dr. Calvert. Phenol forming a true chemical combination with glycerine, and the latter depriving it of its caustic action, offers advantages not to be neglected, and the true method of administering phenol is thereby clearly pointed out. Glycerine also forms the best vehicle for the administration of other strong remedies, as well as those not easily miscible in water, such as iodine, turpentine, resinoid tinctures, etc. These facts so long neglected will be apparent to all who will give the subject proper attention, and many would be more successful in their practice if more attention was paid, by depriving medicines of their nauseous taste, whenever this can be done. To the neglect of this precaution and overdosing, homœopathy owes its start.

SANGUINARINA AND BERBERINA. A fine specimen of each of those alkaloids I also submit for your inspection. Both were made by



Mr. E. S. Wayne. The first from the *sanguinaria canadensis*, and the latter from the *hydrastis canadensis*. To Mr. Wayne is due the credit of discovering the third alkaloid found in the *sanguinaria* (see U. S. Dispensatory, p. 770). I think the profession of this city are under great obligation to him, for always promptly introducing new remedies as soon as they become known.

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### CINCINNATI HOSPITAL.

#### *Clinical Lecture—Facial Paralysis.*

By J. F. WHITE, M. D.

Reported by JAMES T. WHITTAKER.

From complete paralysis up to simple muscular debility there is every grade of loss of power. Occasionally but one limb is affected, occasionally but a single muscle, oftener a set of muscles supplied by an individual and isolated nerve.

Such a case we present you to-day. Facial paralysis, a paralysis of the muscles of the face from loss of innervation by the facial, the motor nerve of the face. The facial is eminently the nerve of expression; a play upon its individual branches with the stimulus of electricity, will display every possible expression of which the human countenance is capable. When this nerve is affected on both sides at once all expression is lost and the countenance becomes a perfect blank. More frequently the paralysis is unilateral, as in the case before us, and then while one side is blank the other retains almost its normal expression. When you reflect that the entire expression is dependent on the exact equipoise of opposing muscles, however, as is the erect posture in standing, you will easily conceive that the deprivation of innervation on one side is instantly taken in advantage by the other, and the whole of the affected is drawn toward the unaffected side.

This distortion of the face is of course a source of constant distress, particularly when, as in the case before us, the patient is a female. It becomes then a question of deepest interest to learn its prognosis, to ascertain its probable duration. To make this

properly we should first hear its history and then ascertain the seat and character of the lesion existent. You will remember, from your knowledge of anatomy, that the facial nerve arises deep within the texture of the brain, its nucleus being situated in the floor of the fourth ventricle. It emerges then from the lateral tract of the medulla oblongata and passes forward and outward upon the crus cerebelli to enter the internal auditory meatus with the auditory nerve. From its ganglion at the bottom of the meatus, it passes into the fallopian aqueduct and traverses the whole length of this canal to the stylo-mastoid foramen just behind the ear, when it spreads out like a fan to distribute its numberless filaments to all the muscles of the face. It sends branches also to the muscles of the ear, the cheek, the tongue and the palate. The lesion, whatever its character, may exist at any portion of its course, from its origin to its termination, and may, consequently, affect all or any of the muscles to which it is distributed. I need hardly inform the youngest student present that such paralysis is unattended with pain, as the nerve of sensation is an entirely different one, namely, the trigeminus. It should not be forgotten, however, that the trigeminus possesses also motor branches which supply the tongue and the masseter muscles, and which communicate with motor filaments from the facial. With these data we are prepared for the history which Dr. Stich, the resident physician, will be kind enough to read :

Isabella M., aged sixty, married. She has "never been sick in her life" until within the last year, when she has occasionally been affected with a severe bleeding at the nose. During this period also she has been subject to occasional headache. A few days before last Christmas she was suddenly "startled" in her sleep about midnight, and experienced a sensation of "shivering" in the left thigh. A copious bleeding from the nose ensued, and she felt that her face was "twisted." She was alone, and had lost the power of speech. Thus she remained until morning, when she could utter a few words with difficulty. Her friends remarked upon the condition of her face, which her mirror confirmed. She had been sleeping, as was her wont, by an open window. In two days the full power of speech returned, but a severe pain behind the right ear, which she first observed at the time of the accident, persisted to four weeks ago, since which time it has almost disappeared. An improvement was observed in the face for three or four weeks, but since that time it has remained unchanged.

Condition on admission. Fair, physical development, remarkably well preserved, intellect intact. The whole right side of the face paralyzed, the orbicularis and frontal muscle inclusive, no creases or wrinkles observable, volitional and expressional motion entirely absent. The eye rolls upward and inward with the attempt to close the lid, but the sclerotic remains bare. The tongue is protruded straight. The uvula depends in a right line. No abnormality of sensation to æsthesiometry. Speech and deglutition are not affected. Mastication is difficult, as food accumulates behind the right cheek. But little dribbling of saliva. Special senses unimpaired. Pains in the left limb of rheumatic character. She is able to walk, but refrains on account of pain.

The main features of this case, as you have heard, gentlemen, are, in the first place, age, then certain predisposing circumstances, headache, epistaxis, exposure, facial palsy and temporary aphasia,

In all cases of this kind the first point in evidence is the discrimination between paralysis of centric or eccentric origin. On this hangs the entire prognosis. Is the trouble within the brain proper, or is it confined to the nerve? One simple symptom enables us to exclude the brain entirely, namely, the paralysis of the orbicular and frontal muscles. In brain lesion this does not occur. The whole of the rest of the face may be involved, but these muscles escape. There are also other points of difference in the electrical reaction, which will be presented further on. The pains in the left leg might lead you, too, to suspect that paralysis was present there; but if you will examine more closely you will discover that the patient can move the limb freely, only she refrains, as the history states, on account of pain. This pain is located in the posterior part of the thigh and in the glutei muscles. It is in all probability only a part of the general rheumatic attack incident to the exposure. Mention is made of a peculiar motion of the eye. It is rolled upward and inward in an attempt to close the lids. Sir Charles Bell, who first developed the paralysis of the facial scientifically, considered this motion of the eye a physiological action during sleep. Todd has shown, however, that the eye is suspended in exact equipoise between all the muscles attached to it, in sleep, and the pupil looks straight forward; but whenever any violence is offered, either in sleep or in waking, reflex action is excited and the ball rolls upward and inward, as if in protection of the pupil. Thus it follows here when a forcible attempt is made to close the immovable lid.



In the reaction of the various muscles to electricity, we possess now a valuable means of diagnosis as to the character and seat of the lesion. As remarked, paralysis of the facial occurs from lesions in different parts of the course of the nerve. It may here be added preliminarily, that these paralysis are also of various duration. For instance, in disease of the cortical substance of the brain, and in dementia, a facial paralysis of temporary duration may occur and reveal itself only by an inability to protrude the tongue. Facial paralysis from these causes are not by any means always unilateral, occasionally one set of muscles being affected on one side, and another set on the other side as an inability to raise the upper lip on one side, or to depress the lower on the other.

Facial paralysis from central lesion, as remarked, is characterized by an escape of paralysis of the orbicularis palpebrarum and of the musc. frontalis. The electrical test reveals a normal or even exaggerated reaction in these cases, showing that the lesion affects the center and leaves the nerve intact. This form may occur isolated or in connection with hemiplegia—and its recognition is always essential, because its lesion is of hemorrhagic nature and an improper treatment might be productive of serious injury. In this connection it should be mentioned that crossed facial paralyzes, that is, one side of the face and the other side of the body refer to a lesion in the pons varolii. In this case the reaction to Faradization is always lessened. When the pons is affected or when the lesion is seated in the facial nucleus all the muscles which the nerve supplies are paralyzed, even the uvula hanging obliquely. Benedikt has given us the diagnostic symptoms of lesion of the facial nucleus, namely, the crossed reflex action under electrical excitation, that is, contractions on the side opposite to that to which the electricity is applied; when the poles are placed upon the paralyzed side the muscles of the unaffected side contract, due of course to reflex action through the nerve of sensation, the trigeminus. This crossed reflex may occur in the face even when electricity is applied to the extremities. Paralyzes again, which are dependent on tumors at the base of the brain, are easily diagnosticated by their complication with paralyzes of the other cerebral nerves with the fact that electricity reveals a diminished or annulled reaction.

Facial paralysis occurs, too, in the progressive paralysis of all the cerebral nerves, and in some rare cases of cerebellar lesion.

In tracing the nerve still further on in its course we meet occasionally with paralysis due to otitis. We would then have all the symptoms of an ear affection, and we would notice, of course, a diminished or annulled reaction to galvanic excitation.

In that form of this affection which is owing to rheumatic cause all the muscles supplied by this nerve are paralyzed. This is observable as well in recent as in chronic cases. The electrical test if essayed within the first ten days shows an increased reaction, if after that period the reaction is feeble or absent. The electro-muscular sensibility, on the other hand, is increased, as is also the reaction to galvanic excitation except in very old cases, when both may be lessened or null.

When, as in our case, the paralysis arises suddenly, it is evidently due to the direct effect of cold upon the nerves, while when it is more gradual in its attack it is due to a reflex action from the cutaneous nerves of sensation. The seat of the rheumatic affection is not always exterior to the escape of the nerve from its bony canal: it may undoubtedly also be located at times within the fallopian canal. I need hardly mention that a facial paralysis may be due also to traumatic cause. You may have observed this in the face of the new-born after a forceps delivery or without it, sometimes in face presentations which are generally, as you are aware, of long duration.

Parotid affections, cervical tumors, etc., may also compress the nerve to an abrogation of its functions. In all such cases the electrical reaction is lessened or entirely absent.

Finally, it should be mentioned that syphilis may affect the nerve in every part of its course.

The position of the uvula is of value in the determination of the character and seat of the lesion. In peripheric traumatic causes, as well as in most rheumatic affections the uvula depends normally, though occasionally in these latter cases it is pushed obliquely toward the unaffected side. In otitis it is also straight, but in lesions of the facial nucleus it is oblique with its point pushed toward either the healthy or affected side. In lesions of the medulla or pons it usually hangs obliquely, while in central lesions it is unaffected.

Double facial paralysis may occur from rheumatism when the impression is made upon both sides at once, or when a later attack supervenes upon the other side.

The prognosis depends upon the age of the affection as well as

upon its seat. In brain lesion when the lesion is of hemorrhagic character the paralysis generally subsides to a great extent, though the face seldom regains its wonted tone. Basilar processes and intra-cranial tumors render the prognosis exceedingly unfavorable. Otitic paralysis disappears only when its cause is removed, as also the syphilitic form. Traumatic paralyzes are of greater or less duration according to the extent of the injury, that of the new born referred to disappearing almost always in a few days. Paralysis from rheumatic form when only of recent duration disappears usually in three or four weeks, if properly treated. When of longer duration as several weeks, as many months of treatment are necessary. Old cases require the treatment of a year or more, and some times remaining defiant of all medication.

In the case before us we may exclude brain lesion at once, because of the participation of the orbicular and frontal muscles. We may likewise exclude syphilis, otitis trauma, progressive atrophy and intra-cranial tumors, because of the absence of the history or other symptoms of these affections. Indeed we have no need to resort to the diagnosis by exclusion. The history and the symptoms point to but one affection, namely, rheumatism, as it is called, from exposure to cold.

It is a matter of much greater difficulty to dispose of the temporary aphasia. The only rational explanation which I can at present offer you is the relaxation of vessel walls near the isle of Rheil, just sufficient to permit the escape of serum without allowing the escape of blood. This is the ingenious hypothesis of Niemeyer, and it best explains these cases, for, as you are aware, serum is very rapidly absorbed again. The age of the patient, and the changes which it induces in the arterial wall may lend strength to this view.

The treatment of these cases is local and general. The local treatment consists in the application of the poles of the magnetic and electric batteries. According to Benedikt the treatment by galvanism sooner restores the action of individual muscles while that of electricity brings back the power of expression, hence he recommends the alternate employment of each with the remark that recent rheumatic cases may be cured by Faradization alone.

He advises, also, that the sessions be short, and that currents of feeble force be employed. It is not at all necessary to use such power as will elicit contraction at once.



In cases of this character the local treatment is by far the most efficient. Syphilis requires of course its specific treatment, hemorrhage in the early stage antiphlogosis, scrofulous tumors iodine and traumatic time. Intracranial tumors and progressive atrophy are not, of course, amenable to treatment.

The general treatment consists in the administration of tonics, and the so-called cerebro-spinal stimulants: as typical of the former iron and of the latter strychnia. This latter remedy has been at all times found as valuable in rheumatic cases as those from other causes. It is preferably administered by the hypodermic method in doses of from  $\frac{1}{60}$  to  $\frac{1}{30}$  grain. Quite recently a case of this character is reported in the *Psychological Journal*. Three injections each of the  $\frac{1}{20}$  grain on alternate days secured full recovery at the end of a week.

In the absence of the induced current we shall make the attempt with strychnia in this case. We shall employ this remedy in the dose of  $\frac{1}{30}$  grain, and present her to you from time to time. She is now temporarily on the iodide of potassium prescribed for the rheumatism of the limb.

The duration of the disease is already too great to lead us to expect a speedy recovery, but we may still be allowed to hope that such an amelioration will in time ensue as will at least spare her the constant mortification always attendant upon facial distortion.

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**Graduates.** The Medical Department, University of Pennsylvania, had a graduating class of 113. Valedictory by Prof. Leidy.

The Jefferson Medical College had 160 graduates.

The Woman's Medical College, of Philadelphia, had 14 graduates, among them we notice the name of Julia W. Carpenter, of this city.

At the St. Louis Medical College there were 43 graduates.

At the Missouri Medical College there were 29 graduates. The charge to the graduates was given by Prof. John S. Moore.

The first commencement of the St. Louis College of Physicians and Surgery (Dr. Bauer's new school), had a graduating class of 2.

## Correspondence.

*Villate's Solution.*

MR. EDITOR: During the past four years, in cases of chronic superficial caries of bone, I have frequently resorted to an injection of Villate's Solution, and have been so much pleased with its effects, that in our clinical lectures I have not hesitated to speak of its use in the strongest terms. Having been so often requested to republish the formula of this French preparation, I send you one which I find in the *Bulletin de la Societe de Chirurgie de Paris*, 1868, vol. 9, 2d ser. p. 189.

R.—Crystalized Sulph. Copper, 3xv.

Crystalized Sulph. Zine, 3xv.

Dissolve in 25 ounces White Wine Vinegar and add

Sub-Acet. Lead, 3xxx.

M.

M. Notta insists that the ordinary white wine vinegar should be substituted for the strong acetic acid hitherto employed, and which was in the formula as published in the *Cincinnati Journal of Medicine*, during the year 1866, when I edited the surgical department of that journal. When I first used this injection I found that it produced in some cases very great pain, and as M. Notta truly observes "insupportable" pain, and I was soon led to dilute it until it could be tolerated. Indeed, from the paper read by M. Notta, it would seem that in three instances death has so speedily followed the injection of Villate's Solution, that it has been regarded as the cause, but M. Notta has satisfactorily shown that, unless the pure acetic acid has been used, or a vein punctured, in a word that when the injection, according to the above formula, has been employed, no unfortunate results have ever occurred.

Respectfully, etc.,

GEO. C. BLACKMAN.

CINCINNATI, April 21, 1870.

P. S. I am informed by Mr. Fennell, a well-known pharmacist of our city, that the white wine vinegar of excellent quality, can be procured from Mr. Helferich, dealer in foreign wines, etc., 395 Main street.

## Editorial.

*Medical Education.* We indicated last month, the points we think should engage the attention of the Teachers' Convention, about to assemble in Washington. There has been a general impression that the time has at length come, when educational sentiment would accept and require some definite action by the American Association, directed by the Teachers' meeting; and we had hoped that journalists and educators would have heartily met this question. We regret, however, to see a general disposition to ignore the whole subject, and on the part of a few to ridicule effort in this direction. Of this latter we may particularly include the *Medical Bulletin* of Baltimore, seconded and indorsed by the *Philadelphia Reporter*. We are very sorry to hear the editors of these journals use such language as this—that this “convention is another scene in the farce which is annually enacted by the Association.” Our friend of the *Bulletin* is “heartily tired of these conventions”—and we are very sorry for the delicacy of his system.

Now, what is the fact? There have been exactly *two* of these conventions of medical teachers; and if we succeed in reducing the chaos of medical teaching to a satisfactory system, working harmoniously, after a *dozen* conventions, we think it will be work well done. The American Association, to be sure, has had the subject of medical education as a standing theme; upon the various questions of progress, as well as of uniformity of fees it has again and again expressed recommendatory views, but whenever the colleges have, in their individual capacity, attempted to carry out these suggestions, the profession has very lamely sustained the colleges. Their patronage has gone where fees and requirements are easy. Nevertheless, we think these efforts of conventions and the Association have not been without avail. If any one will candidly study this question, he will see that the sentiment is steadily growing in favor of fuller, completer, more thorough plans of education in this country. To a great degree, we believe that this improved sentiment has been developed by these efforts, which our friends ridicule as meaningless generalities. Hitherto these



efforts could not be otherwise than merely suggestions, but we believe the time has come when the American Association should test its power. So then we repeat, let the Convention wisely, temperately and prudently determine a plan of requirements for the doctorate—a system adapted to our social conditions in America, including a scale of fees—and then let the Association absolutely require conformity to this plan, to secure representation. If the plan is not as full or complete as some of them deem best or desirable, still let us have it, and it can grow hereafter. This idea is not materially different from the idea of the *Philadelphia Reporter*, proposing a “chapter of colleges,” but we think our plan is the simpler mode of reaching the difficulty.

**American Medical Journalism.** A recent number of the New York *Medical Gazette* has a really very excellent article with the above caption. The editor reviews some of our leading defects as compared with British medical journals, and the reasons therefor. We can not afford space for the whole, or we should reproduce it entire. We quote a portion, however. The article alludes to the fact that for the most part medical journalism is not a *business* in America. Busy practitioners devote a portion of space, snatched moments, to “get up” the number—hence it is apt to be greatly “selected.” The great number of journals is another evil, dividing up the patronage, so that none are heartily and liberally supported; and thus few are really able, pecuniarily, to bestow upon the journals the requisite outlay to make them first-class. Thus, every leading city in the country must have one or more journals. Every college must have its “organ.” The friends of each locality, or little medical center, are besought to sustain the sectional enterprise. No wonder, then, that there are so many poor journals, and no wonder that very many of them barely exist, or are published at a pecuniary loss to their owners. The *Gazette* concludes as follows:

“In journalism, as in every thing else, the supply should be made to meet the demand; and there is neither a large enough demand, nor sufficient available literary material, to give adequate support for more than a dozen out of a half hundred medical journals published in America. While all of these united reach, perhaps twenty-five thousand readers, there are very few even of what we call our leading journals that can count as many hundred individ-

ually. Hence the publishers can not afford the outlay necessary to augment the value of their issues. It will not do to argue here that if such outlay be made the increased value of the periodical will ensure remuneration; for (as we have had several occasions to learn) if an editor incur the expense of special reports of important lectures or other things of interest, such matter finds a large audience, not by the increased sale of his periodical, but by being forthwith copied into a score or so of his contemporaries.

"Let it not be supposed that the foregoing remarks are actuated by selfish querulousness. In many of the respects to which we have referred we have less cause for complaint than most of our brethren; and our readers are distributed with tolerable impartiality over every section of the United States. We have only in view what we firmly believe to be the best interest of medical journalism, and while we are confident that if this were placed upon its proper footing there would be an ample field for two or three additional weekly periodicals, we are sure that it would be better for journalism and for the professional reader if at least three-fourths of existing medical publications were discontinued;—better for the former, because the journalist would be enabled to make what is now a hurried, ill-paid task his chief occupation; better for the reader, because he would gain all the information of the day in a few really profitable hours of reading, instead of having to hunt through so many separate heaps of chaff in search of scattered grains of wheat."

***Professional Advertising.*** An esteemed professional friend writes us upon this subject. He very justly complains that traveling mountebanks and charlatans resort to hand-bills and false pretenses of marvelous cures, through the papers, and as the result people run after them, pay them large fees, while the modest claim of the honest family doctor is left unpaid. Thus the rascals fill their pockets, while the poor physician starves trying to practice his profession honorably. And worse still, respectable but uninformed patrons, learning how they are deceived by these charlatans, come to regard all medicine and medical men as humbugs. He inquires what we are to do to meet this evil, and whether, after all, we do not overlook plain business laws in refusing to advertise; or whether, indeed, we may not fairly present our claims as regular physicians to the understanding of our friends and patrons.

It is fair to announce your business in a card, but our friend will find, as all who try it have, that respectable physicians can never cope with mountebanks in the hand-bill line. There is no height or depth of that sort of thing where they will not find a greater. And while it is exceedingly vexatious to see the evils our friend complains of, we have long been satisfied that in the long race, the straightforward, honorable plan, as recognized by our code, is the best. If our patrons are for a season led astray by *false gods*, we must strive patiently to show them the deception, and by our own worthy course exhibit the bright line of separation.

Our friend suggests the propriety of physicians distributing copies of the *Code of Ethics* among their neighbors, to show the position of the true physician, and his relations with the community. This would be well. A neat pamphlet edition of the *Code* is kept on sale by Collins (printer of *Am. Med. Soc. Trans.*), 705 Jayne street, Philadelphia, at \$10 per 100 copies. It is also inquired what the *Address* of Prof. Taylor would cost for the same purpose? If there was a demand for several hundred copies to justify its being reset, it could be furnished for about the same cost.

***Surgical Instruments.*** Mr. Autenrieth, who has been with Mr. Woher for many years, has purchased the store of Wm. Z. Rees, in this city, and will conduct the surgical instrument business and manufacture in all its departments. Many of our friends have found Mr. Autenrieth a pleasant gentleman to deal with while with Mr. Woher, and will, doubtless, find it well to give him a call at his new quarters.

***The Ohio State Medical Society*** will meet in Cleveland on Tuesday, the 14th of June. Next month we shall announce more particularly the committees and probable reports.

***The Indiana State Medical Society*** meets in Indianapolis, May 17th. The Secretary's notice comes too late for insertion, but we are promised a rich bill of fare.

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E. B. STEVENS, Editor.

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Vol. XIII.—JUNE, 1870—No. 6.

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Original Communications.

*Art. I.--Report of a Discussion upon Hospitalism and Zymotic Diseases as more especially Illustrated by Puerperal Fever or Metria.*

Abridged from the authorized Report.

By AND. C. KEMPER, A. M., M. D., Cincinnati.

[Continued from the last number.]

Dr. Johnston, now master of the Rotunda hospital, Dublin, said: "Because 'continued fever, typhus or erysipelas, are prevalent in medical or surgical hospitals,' it is not a necessary consequence that 'puerperal fever should prevail in the lying-in hospital.' When such diseases are epidemic in the city and a patient laboring under one or the other of them is admitted to the lying-in hospital, there is no reason for saying that the institution is, therefore, the habitat of their poison. It can not be admitted that metria prevails in hospitals generally; it may appear occasionally in the ill-ventilated or over-crowded. It is unjust to say that metria,

when epidemic, appears first in our maternity hospitals; indeed, the hospital has frequently been free from it when it was epidemic in the city. Admitting the second proposition, and considering the over-crowded, unwashed, ill-ventilated rooms of their own homes, where this poison finds a fertile soil; where many deaths occur that we never hear of; that it is from these hot-beds that our patients principally come; we can not then be astonished that occasional cases of metria occur within our walls. Contrast these hovels with the airy wards, with outlets on all sides for ventilation, with ample cubic space of air for each patient to dilute the poison, with strictest cleanliness by scouring, fumigating, sponging of the patient, and daily change of clothes, immediate removal of the ejecta, where every attention is given to the comfort and well being of the patient, and where, by reason of such care, it is hardly, if at all, possible that any poison can find a habitat. Collins, Shekelton, McClintock, and Denham, in their respective masterships, improved the ventilation and decreased the death rate. I must, therefore, contradict Dr. Kennedy's assertion that the intention of the founder of the Rotunda has failed, because the original plan and construction of the hospital was faulty; and that the congregating of a number of lying-in women under the same roof engenders and spreads among them a disease *sui generis* and most fatal. There is not a house within 140 feet of the Rotunda building, nor a tree, excepting one, within 100; a nine feet wide corridor on each floor the whole length of the building, in the direction of the prevailing winds, with steadily open windows at each end; off this are the wards,\* two at each end of the building, 34 by 24 feet, 13 feet high, separated on the one side by the chapel, and on the other by a broad staircase with a large window constantly open, thus isolating the wards as much almost as if they were separate buildings; there are two, sometimes three, windows in each ward, with windows near the ceiling opposite them, opening on the corridors, besides ventilators running to the roof and circular openings opposite the fireplace at each end of the ward. The atmosphere is perfectly pure and innocuous; there is no miasm or poison; nothing approaching to contagion. True, we have had cases of metria, but they were cases of seduction or laboring under other great distress of mind.

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\* Only the first eight wards in the central building on the second and third floors are described. Nine is on the first floor, the rest in the west wing.



And it is remarkable and must be noted, that where a patient was attacked with the malady it was confined to that particular individual, never extending beyond her. Even the ward Dr. Kennedy was compelled to close is healthy.\* Two patients came into it from the same locality recently, having dry, brown fur tongues; pulse 100; delivered naturally; shortly after, peritonitis of the same type; treated in the same way; one died, the other recovered; no other patient in the ward took the sickness. A case in ward 7, six months ago; erysipelas immediately after labor; removed from the ward instantly; died on the 19th day; four others in the ward at the same time made good recoveries. A case in ward 12; seduction; pyemia after confinement, from which she died, yet no one in the suite of rooms took it. The hospital therefore is not the 'centre of malaria;' we do not 'delude poor women.' This hospital receives every patient without let or hindrance; from England, Ireland, and Scotland; those whom unskillful practitioners have failed, after tedious efforts, to deliver; those even with ruptured uterus; those who have been spurned by friends; and all must be accounted for in the statistics. It would make a material difference in the death rate to deduct such cases from the statistics. Because some of these succumb even to metria, does not justify the assertion that the hospital is the 'hot-bed' for the cause of it."

Dr. Atthill, assistant physician, Rotunda, said: "Metria is often epidemic, sometimes contagious, and largely preventible. I dissent, however, to propositions 2 and 3. We know with positive certainty that the contagion emanating from such diseases as erysipelas and scarlatina, will originate metria in parturient females; but the question of self-generation is merely speculative and does not strengthen the argument. Metria is generally due to influences acting on the patient from without; an important one of these overlooked by Dr. K., is contamination from the hands of attendants. In the Vienna lying-in hospital for the ten years prior to 1847, the mortality had been from  $5\frac{1}{2}$  per cent. to 11 per cent. Then the students constantly engaged in dissecting, etc., were prevented from entering the wards until their hands had been thoroughly cleansed and disinfected, and the mortality fell at once to  $1\frac{1}{4}$  per cent., and has continued low. While this proves that me-

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\*Ward 11 in the west wing, third floor, communicating with 12, the surgical ward, which communicates with 13, the operating room.

tria is preventible, yet all such sources of infection must be carefully excluded before the effect of self-generation, or generation in consequence of aggregation, can be rightly estimated. At this same time in the Vienna hospital, the two divisions of the hospital were under the same roof, with the same number of patients and the same treatment, and yet the mortality was as 30 in the male to 600 in the female division.\* Surely then, metria is not generated in *direct proportion* to the number of parturients cohabiting. But now to Dr. K's. statistics as against himself. In the crowded days of the hospital we have such death rates as 1 in 309; 1 in 205; 1 in 220. But take any five consecutive years, as 1800-4 inclusive; deliveries, 8,990; death rate, 1 in 67; or 1805-9; 12,691; 1 in 157; or 1804-8; 5,758; 1 in 31. In any five years during the past 30, the death rate is increased, while the number of patients is decreased. For the last twenty years the hospital has not been so crowded or had so low a mortality as for 1850-3 inclusive. The generation of metria, therefore, has no relation, whatever, to the number of parturient females collected together. The increased mortality must be due to epidemic influences; and causes acting from without the patient's own body, one of which I have mentioned."

Dr. Madden, assistant physician, Rotunda, said: "With very few exceptions all the cases of puerperal fever I have seen were essentially of an asthenic type, and not suitable for any depletion, though leeches may be used advantageously in inflammatory puerperal peritonitis. The medicines which do most good are turpentine in dram doses, mild sedatives and chlorate of potash. I have seen puerperal pyemia recover under treatment. It is, doubtless, true that since the first epidemic of metria, in the Hotel Dieu, Paris, in 1746, the proportion of deaths from this disease have always been greatest in lying-in hospitals. This is due to faults in construction, ventilation, hygienic condition and management, which faults do not exist in the Rotunda. Besides the disease often prevails out of doors when the hospital is perfectly free from it. If the question then is mainly one of hygienic con-

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\*One division of this hospital is devoted to the education of medical students, the other of midwives; the students were constantly in the dissecting room and dead house, the midwives never; metria raged in the students' division, and was light in that of the midwives; disinfecting the hands of the students, etc., mitigated greatly the mortality. But in the winter of 1861-2 the disease was more frequent and more fatal in the midwives' division.

dition and ventilation, the mere number of parturient women confined together can matter comparatively little. Although metria is undoubtedly contagious, still contagion is not the only or general way in which, as an epidemic, it is spread. I never yet saw two patients in adjoining beds afflicted with it at the same time. Contagion probably has much less to do with the spread of puerperal fever than the peculiar epidemic condition of the atmosphere by which it is carried from place to place. The victims of seduction flock to us from every quarter of Great Britain, and are they who most frequently succumb to puerperal fever. Such cases and "bad cases" without number, even moribund at their entrance, ought not to be a reproach to the hospital. It is the boast of the Rotunda that she never refuses admission to any parturient woman who seeks shelter within her ever open portals; she has saved thousands of lives. I have attended a lying-in woman, in her own house, with less than 350 cubic feet of atmosphere for each inmate. The clean, well-ventilated ward of the hospital, with 1,500 cubic feet of space for each patient is certainly not so much over-crowded as that. Our death rate is lower than calculated by Dr. K., and is still decreasing."

Dr. *George H. Kidd*, late editor of the *Dublin Quarterly Journal* and late master of the Coombe lying-in hospital, Dublin, said: "Dr. K. used a return of the Coombe for a period of seven years, regretting that he could not present the complete return. I now present that return for the whole period of fifteen years. During these fifteen years the total number confined in the Coombe was 6,573. That was of patients confined at full term. All cases of abortion and of premature labor taking place before the seventh month had been excluded. Of these 6,573, the total deaths amounted to 1 in 73\*. Of these, the deaths from puerperal fever were 1 in 119, and from other causes 1 in 193. During these years 15 patients were removed from the Coombe hospital in consequence of being affected with some form of infectious disease, and brought to other hospitals. They had not been able to trace the history of those patients; 13 of them left during the first period of seven years; 2 left in the latter period of seven years. He believed, indeed, in the ninth year of the period of which he spoke, and for the last six years, no patient had left on account of being affected by any infectious disease. They had not

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\* Fractions omitted.



been able, as he had said, to trace the history of these 15, but they knew that they did not all die, and they also knew that they were not all affected with puerperal fever. But suppose they granted that the whole of these 15 died, then their average mortality from puerperal fever would be 1 in 93, instead of 1 in 119, and their total mortality would be 1 in 63. This subject is now being discussed throughout Europe; but by no one more ably than Dr. Kennedy.

"The view that contagion is the great cause, almost the exclusive cause of puerperal fever, is too exclusive. The causes of it were often individual, belonging to the patient herself; no one succumbed to it more rapidly than the victim of seduction. Patients subject to distress, starvation, misery, were the most liable to it, and it is to such that the hospital is of the greatest use. There were also epidemic causes, as the returns of the Rotunda plainly show. It is due to some epidemic constitution of the atmosphere. The form of metria varies. The contagion varies, or there is some difference in the constitution of the atmosphere. Years ago, in almost every case in the Coombe the joints were affected. Now there is no peritonitis, no effusion into the joints, no inflammation of the pleura or other serous cavities, but patients sink at once into a typhoid condition and die of asthenia without local lesion. The disease is highly contagious, and to this attention must be directed if it is to be prevented. I have seen it in adjoining beds, one remarkable instance; leeches; erysipelas; recovery; while the patient on each side died, one by effusion into the joints, the other by collapse. We can not compare the statistics of extern practice with lying-in hospitals. I have had twenty years' experience with large extern practice of the Coombe, and the statistics of that practice are not reliable. Besides an extern practice in connection with a hospital affects the mortality of both, since all the difficult cases are brought into hospital. It is impossible to collect a large number of patients under one roof and not have a hospital atmosphere, and that atmosphere is more or less injurious. In view of the rebuilding and enlargement of the Coombe, this subject has engaged our serious attention. The experience of the Vienna has not been neglected, although too much importance has been given to that cause of metria. Dublin students do not go from the dissecting room to patients without washing their hands. We have thought of isolating patients, having a separate ward for each. That plan

was tried in the St. Petersburg hospital in 1852; small wards opening off a corridor. For the seven years previous to its adoption the death rate was 1 in 32, for the seven years next subsequent 1 in 34. The plan was not justified. We propose to build three distinct and separate buildings, with a detached house in the rear, and continue our present management; that is as soon as a patient manifests symptoms of metria, send home all in that building that are healthy enough to go; after the recovery or death of the remainder, cleanse and fumigate the building; until after which no new patients are admitted into it. The new buildings would simplify the management, the metria cases being carried to the detached house in the rear."

Dr. *Mapother*, the physician of St. Vincent hospital, said: "I agree with Dr. Kidd that the statistics of out-door practice are unreliable and can not be compared with lying-in hospital practice; but the remarkable statistics of the comparative mortality of the Rotunda, and of the cottage hospitals of Waterford, Limerick and New Ross have not, as yet, been controverted. Metria has no separate entity; it is merely the infection of many other diseases given to persons much more liable to the spread of such disease and its fatal effects than other individuals. I have seen in St. Vincent many cases of erysipelas from the Rotunda, during outbursts of metria. The excessive fatality of puerperal women from zymotic disease is owing to the excess of albumen in their blood."

Dr. *Fleetwood Churchill*, consulting accoucheur of the Coombe and Rotunda, said: "The question is ought we to reverse all our hospital arrangements and confessing the evil they have done, enter upon a new and opposite course; have we data of sufficient weight and accuracy to justify this?"

"Some of the conclusions of Dr. K.'s paper require a little modification or limitation:

"1. Too much stress is laid upon the spontaneous generation of puerperal fever in hospitals, and there is hardly a due estimate of the epidemic influence as a cause. If it be produced spontaneously, why do long periods of freedom from it occur under precisely the same hospital conditions as those which accompany its appearance. In the Rotunda, in the first two months of 1845, there were 367 deliveries and no deaths, and yet between the 2d and 5th of the following month there were 14 cases of the worst form of metria. Contagion can not account for this. Metria is really epi-

demic, and so propagated to a much greater extent than by contagion.

"2. Women confined at home are not exempt from metria. There was not one case reported from the Western lying-in hospital, in the report of 1835-6, while 11 cases were reported among women confined in their own homes. A similar occurrence is recorded at Glasgow. In private practice, Dr. Kennedy has had 3 fatal cases, Dr. M. Clarke 6, and I 6.

"3. As to its occurrence in small lying-in hospitals: There were in the Western, 2 fatal cases; in the Montreal, 5; in the Waterford, 2; in the Southeastern, 11; and in the British, 7; so that we can not assume their absolute immunity; and when we remember the small number of deliveries, the proportion of metria appears even considerable. On the other hand it can not be doubted that a large hospital, however well arranged, with many patients, however well cared for, will prove an admirable hot-bed for intensifying and propagating the disease, *when once it appears there*.

"4. Puerperal fever may be both generated and propagated by contagion. The pupil 'on the pale horse' proves that; and there are other similar cases; but there must be the favorable circumstances of personal uncleanness, abstinence from water, clean clothes and fresh air. Dr. K. never carried metria, nor have I. If the danger is as great as stated, medical men attending metria ought to refuse attendance on midwifery cases, even in consultation; but this precaution is never thought necessary. In a few instances metria has dogged the steps of one man while others were exempt. I can not explain this. You will find that in some the succession was broken by considerable periods of time, and in others by the intervention of deliveries not followed by metria. The American authorities quote such a case.\* The assertion that metria is carried by the doctor causes great distress to the patients and injury to the accoucheur.

"I come now to the comparative safety and utility of outdoor maternities, small lying-in hospitals, and large hospitals. We are here entirely at the mercy of statistics; few have made greater use of them than I; yet I feel that they may easily be taken for more than they are worth.

"1. The value of statistics is exactly in proportion to their extent. I will illustrate from private practice: Dr. Kennedy's 3,816, 1 in

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\*Dr. Rutter, of Philadelphia, mentioned by Dr. Meigs.



173; Dr. Crosse's 1,377, 1 in 168; a London accoucheur, 2,982, 1 in 99; my own, 2,548, 1 in 159. None of these will suffice for a standard for private practice. If added together we can not estimate from them the death rate after confinement. If they were fifty times more extensive we might have some confidence in the conclusions drawn from them. The same rule applies to small hospitals; and with increased force when an epidemic of puerperal fever occurs. This uncertainty can only be corrected when the numbers are very large and the time embraced is considerable.

"2. Statistics must be accurate. The statistics of the Royal maternity, London, are much relied on by those who advocate maternities *versus* hospitals. The death rate is 1 in 334. The attendant is required to visit the patient three times after delivery. My acquaintance with human nature leads me to doubt that this rule is always complied with. In 129 cases of metria, 30 commenced after three days. Even then, if the rule were complied with, here is room for material alteration in the death rate. Besides, if the statistics as stated are trustworthy, the poor of London are marvelously better off than the rich, for no private practice shows such favorable statistics.

"3. We must compare like with like. Dr. Kennedy asserts that the excessive mortality of large lying-in hospitals, as compared with the small ones or maternities, arises mainly from the prevalence of metria. He has taken the entire death rates of the hospitals, and not the death rate from metria, which makes a fearful difference. In Dr. Collins' report\* the death rate from metria was 1 in  $297\frac{1}{3}$ ; Drs. Johnston's and Sinclair's, 1 in  $289\frac{1}{2}$ ; in Dr. McClintock's, 1 in 214; in Dr. Kennedy's, 1 in 112. The difference is as great in private practice: Dr. Kennedy, 1 in 1200; Dr. M. Clarke, 1 in 641; in my own, 1 in 424. Though I have not availed myself of the records of foreign hospitals, I have calculated some statistics from our own, showing the total number of cases, total number of deaths, and when I could obtain it the number of deaths from metria, and while the numbers are too small for reliable inference, they will show the difference between the death rate in small hospitals when taken separately for metria only, and the total death rate.† In six maternities there were 236,665 cases;

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\*Of the Rotunda hospital during his mastership.

† "Having written so far before adding up the cases, I confess I was as much surprised at the result as any one can be. I can only say that as my object

1,590 deaths, or one in 149, a striking contrast to that of the Royal Maternity, included in the six, which was 1 in 329. In twelve small hospitals, 27,300 cases, death rate 1 in 67. In four of these hospitals the death rate from metria was 1 in 303. In the large hospitals, in four masterpieces of the Rotunda, there were 38,429 cases, 520 deaths, or 1 in 93, while the death rate from metria was 1 in 185. These statistics teach us that until we can find a much smaller death rate in the small hospitals, we should be very cautious in destroying the large ones, or diverting them from their present use. If we had no hospitals we might provide small ones, so that in the event of the metria making its appearance, we could close them with less inconvenience; but what might be right under such circumstances would be both hasty and injudicious now."

Dr. *Morgan*, of the Lock hospital, said: "In my hospital there have been 74 deliveries and one death. The mental condition of the patients afflicted with venereal and deserted by their friends could not be worse. There are two beds in the lying-in ward, and for twelve months there has been no case of puerperal fever, although there were six of erysipelas in the ward, connected with it by a door."

Dr. *David B. Hewitt*, graduate of the Coombe hospital, said: "I know from my experience that isolation is not attained among the poor in their own homes, therefore the statistics of external practice are valueless. If there were any zymotic poison, even though it be of a fixed nature, which has not yet been suggested, it is not communicated by the fluids of the parturient, and therefore is communicated through the air. Now if this zymotic poison in the dwellings of the poor will spread it to other parturients in the same house, we should have some observations of it. Typhus fever and scarlatina will spread from one to every room of a house. If metria was a zymotic disease, the same thing would occur with it. In the large hospitals in the poor districts of London, disease does not spread to the adjoining houses, although they be within a few yards of the hospital windows. It is remarkable that zymotic disease does not spread to adjoining houses."

Dr. *Evory Kennedy* begged to remark of the discussion thus far, in the language of an eminent judge, "I agree with the two

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has been simply to find out the truth, so I am prepared to admit it, whether it contradicts my previous opinion (as in the present case) or confirms it."  
—*Churchill*.

doctors for the reason assigned by the other two, who differ from them."

Dr. A. H. *McClintock*, sixteenth master of the Rotunda, etc., said: "We do well to follow the examples of the French, American and Norwegian societies in discussing this supremely important question. True puerperal fever is a zymotic disease; nevertheless, as an American truly says, 'We may have phlebitis in the puerperal woman, and not have puerperal fever;' we may also have peritonitis without metria; and there is sometimes difficulty in distinguishing to which class a certain case belongs. We are loth to suppose that Dr. Kennedy would ascribe the different zymotic poisons to a common principle. His doctrine as I understand it is not tenable. Does metria ever communicate measles, smallpox, scarlatina, or typhus? Does scarlatina ever produce anything else but scarlatina? No doubt these diseases are aggravated, and increase the danger, in the puerperal woman; and yet they always preserve their identity and their specific forms and the power of perpetuating or extending themselves. Their characters are not lost in those of puerperal fever; and if during their course the phenomena or natural lesions and complications usually observed in malignant puerperal fever, appear also in them, they are merely superadded and become the causes of the greater malignancy and more rapid progress of the malady to a fatal issue.

"The appearance of any of these zymotics in a lying-in hospital is much to be dreaded, both because of their great danger and the peculiar susceptibility to any zymotic infection of puerperal patients. Metria is more apt to appear at times when typhus, scarlatina and erysipelas are prevalent; but it does not, therefore, follow that these several poisons have a common origin, at least we are not compelled to adopt such a conclusion, and where there is so much subtlety and obscurity, to doubt is the highest wisdom. The atmosphere may contribute to the extension of zymotics by making their contagia transferable or transportable, or by disposing the constitution to their reception. To this presumed law of the fixed or immutable nature of zymotic diseases, there are two notable exceptions, namely, erysipelas and metria, which are mutually convertible, and therefore have a common zymotic poison or contagion for their production; indeed, there is little room to doubt that they are one and the same disease. Over one hundred years ago metria was regarded as an epidemic erysipelatous inflammation of the peritoneum, and now it is laid down as



a demonstrated fact, that a surgeon going to a puerperal woman from attendance upon a case of erysipelas may convey to her the specific contagion and cause her death by that form of puerperal fever, which, under a special name is but intra-abdominal erysipelas. In this respect erysipelas has a peculiar place among zymotic diseases. The common nature, the identity of zymotic metria and traumatic erysipelas is then established. I have always held that true puerperal fever, zymotic metria, is a communicable disease. Twenty-two years ago, I wrote that the contagiousness of puerperal fever in all its forms is a fact established upon irrefragible evidence. I agree that it is about as contagious as erysipelas, but no more. It is very desirable that this question should be settled, as there is a prevalent opinion that metria of every kind, whether zymotic or non-zymotic, is pre-eminently and obstinately contagious. Some of the arguments of the contagionists prove too much, as for instance, the argument from the case of Dr. Rutter, of Philadelphia, who absented himself at a distance of thirty-five miles, for ten days, changed his entire raiment, bathed, and even shaved his head, and yet the contagion seemed to cling to him on his return. I can conscientiously aver that in twenty-five years' practice I never carried contagion to a patient; I used always and carefully the ordinary precautions; I attended cases in the city when the disease was so frightfully prevalent in it, and so terribly fatal in the Rotunda during my mastership of it.

Myself and others have had frequent occasion to remark that the order of succession in cases of puerperal fever in hospitals is most irregular and capricious, one case in this ward, another in that, and consecutive cases in wards the most distant. While admitting that zymotic metria is in all respects, contagiousness included, on a parallel with erysipelas, I must reject the contagiousness of non-zymotic local inflammations, whether uterine or peritoneal incident to childbed. In cases where there was the highest presumptive reason for supposing that the attack of puerperal fever was due to contagion, I have sometimes felt a difficulty in believing this in consequence of the extreme rapidity with which the effect has followed upon the supposed cause, a rapidity almost unknown among other morbid poisons, when not introduced by direct inoculation. The period of latency of the poison of smallpox is from 16 to 20 days; of scarlatina, 7 to 10 days; of measles, 10 to 14 days; of paludal fever even a twelvemonth; of

hydrophobia, a still longer time, and of erysipelas 2 to 14 days; while the instances of puerperal fever are innumerable, where if contagion excited the disease, it did so in from 6 to 12 hours after the communication of the poison. At the same time, I can readily understand how an epidemic constitution of the air, by powerfully disposing the body to the action of a zymotic poison may cause this to take effect with unwonted and exceptional rapidity. Though but a limited contagionist, I hold very strongly to the producibility of metria by inoculation. The experience of the Vienna hospital should not be forgotten; students while attending at lying-in hospitals should be precluded from dissecting or from being dressers at surgical hospitals; and now that I have passed the mastership of the Rotunda, and also am in the enjoyment of the honor of being president of the Pathological society, I am free to say, that a man who devotes himself to obstetrics should abjure the study of pathological anatomy. Both theory and experience prove to us that the attachment of lying-in wards to general hospitals is in every way open to objection. Dr. K. has made out a strong case, in his way, against the larger lying-in hospitals. But while I readily concede the greater mortality among women confined in these institutions, as compared with the aggregate of women confined in their own homes, I am of opinion that this difference has been greatly exaggerated, that it is only in part attributable to hospital influence, and that the soundness of some of his propositions and statistics bearing on this point may fairly be called in question. Let us appeal to facts to test the proposition that the generation and absorption of metria contagion is in direct proportion to the number of women cohabiting in their lying-in, and that its habitat is the great lying-in hospitals.

"1. In the Rotunda hospital for 1842-3-4, there were 6,634 deliveries, and the deaths from puerperal fever, and the various puerperal inflammations were 1 in 214.

"2. In 1850-1-2-3, deliveries, 7,919, deaths from metria 1 in 585.

"3. In 1829-30-1-2-3, deliveries, 10,785, and not a single death from metria.

"4. During the last fifteen years the average number of patients in the Rotunda was little more than half that of previous years, yet the mortality has been double.

"5. During the same period the highest rate of mortality does

not coincide with the greatest number of admissions, but the reverse.

"6. In 1815-21, deliveries, 10,248, the patients were often two in a bed and yet the death rate was only 1 in 180.

"7. The average annual admissions into the New Ross cottage hospital was not a third of those of the Waterford cottage hospital, and yet the death rates were of the first, 1 in 185, and of the last, 1 in 227.

"And yet I agree that where an epidemic of puerperal fever invades a lying-in hospital, the intensity as well as the extent of its ravages will be in proportion to the number of patients at the time. Metria is a disease observed to occur in small lying-in hospitals; in the Waterford, annual deliveries 115, there have been 5 deaths from metria; in the Liverpool, where none but respectable married women are admitted, annual deliveries 150, there were 5 deaths from metria in two years; in the admirable South Eastern 350 annual deliveries, the death rate from metria has been 1 in 98; in the Kingstown, annual deliveries 100, death rate from metria 1 in 114; and it could not be otherwise if metria may occur sporadically, which is admitted in the assertion that it 'may be generated by any parturient female.' I dislike and distrust statistics; like the microscope, they magnify both truth and error. I protest, too, against the death rate of these small provincial lying-in charities, differing in their geographical position, the periods over which the rates extend and in the social and physical condition of their patients being taken as the true standard by which to measure the healthfulness of any large metropolitan lying-in hospital. The large city hospital will not have as healthy inmates as that in the country or provincial town; the mortality among lying-in women varies greatly in different places; and the physical, social, and other conditions of patients influence largely the results of treatment; one hospital admits none but respectable married women, another will not receive women in their first labors, while a third is open to all; one-fourth of the women confined in the Rotunda during my mastership, known to be unmarried, died; such women prefer for obvious reasons the large hospitals. Notwithstanding our elaborate registration reports there are no reliable returns of the mortality of women confined at their own homes, and it is idle out of these reports to construct a standard of comparison between hospital and home practice. When a woman happens to die in childbed of phthisis, pneu-



monia, dysentery, apoplexy, albuminuria, bronchitis, morbus cordis, or other intercurrent disease, this alone is rightly returned to the registrar as the cause of death. Consequently all these deaths have no place in the registration reports of deaths in child-bed. But a lying-in hospital is debited with every death occurring among the patients, whether the death arises from intercurrent disease, or directly from parturition, or from metria. In this way we can account for much of the discrepancy that exists between the death rate of lying-in hospitals and that deduced from the returns of the Registrar General. I will illustrate by some statistics from the practice of eight thoroughly reliable gentlemen, including those of Sir P. Dun's maternity. In 16,774 cases there were 131 deaths; from labor, 45; from puerperal disease, 52, and from non-puerperal disease, 34; from which it is seen that the deaths from non-puerperal disease were more than one-fourth the entire mortality. Take another example from the report of the Registrar General of England and Wales\* for 1838-41; there were 11,722 deaths in childbed, the rate of mortality being 1 in 171 births, or making the usual allowance for twins 1 in 168 women; but if I am correct, that only three-fourths of the deaths are registered, the mortality would be 1 in 126; and these views about the death rate in home midwifery practice are corroborated by some indisputable facts.

"1. Of 2,982 ladies delivered in London by an eminent gentleman, the death rate was 1 in 99.

"2. Dr. Crosse, of Norwich, attended 1,377 confinements with a death rate of 1 in 98.

"3. Dr. Joseph Clarke, of Dublin, 3,847 patients; death rate 1 in 174.†

"4. Dr. Labatt, Dublin; 4,368 labors; 1 in 168.

"5. In my own private practice 652 cases; 1 in 108.

"6. Dr. Brunker, County Louth, 334 cases; 1 in 58.

"7. Dr. Churchill, Dublin, 2,548 patients; 1 in 159.

"Of the total 16,108 cases the mortality was 1 in 134. I am aware that a serious objection attaches to these statistics on account of the class of patients and practitioners; but if the mortality among women in luxurious homes with the most eminent medical skill is 1 in 134, what must it be in the wretched abodes of poverty? In the Dublin Registration District for 1864-8, the

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\* This does not include city districts.

† The total mortality is given in all these cases.

deaths in childbed were 373; take from this the deaths in the Coombe and Rotunda during these five years, 206, and we find the death rate of women confined out of hospital in the city and suburbs to be 1 in 207; but if we increase the deaths by the deaths in childbed from non-puerperal diseases, which has been shown to be one-fourth of the entire number, we find the Dublin death rate to be 1 in 156. These three rates, obtained by independent statistical calculations, exhibit a remarkable approximation. But I may demonstrate in another way that one-fourth is not too much to allow for the deaths omitted in the registration returns of deaths in childbed. We have seen above that the proportion of deaths from the accidents of labor to those of non-puerperal diseases is as 45 to 34. Now, applying this ratio to the Dublin statistics of home midwifery for the last five years, in which the deaths from the accidents of labor were 126, and we have  $45 : 34 :: 126 : 95$ . This process shows that the deaths from non-puerperal diseases is greater than one-fourth of the entire number of deaths. Then adding this 95 to the gross number of deaths, 167, we have 262, and dividing this into the total number of births returned out of hospital, making the usual allowance for twins, 34,590, \* we find the death rate of women confined in their own homes in and around Dublin during the last five years to be 1 in 132."

Dr. John Denham, the last retired master of the Rotunda, said: "The statistics of out-door lying-in patients are utterly worthless and unreliable. I can prove that many poor women attended at their homes by students or midwives from a hospital, are never seen more than once or twice after their deliveries, and are very often obliged to seek advice from the dispensary doctor or go into a neighboring hospital; and that they are seldom put down in the records of the maternity or hospital as puerperal cases, but whether they live or die appear there as "natural labors recovered." To make any just comparison between the large hospitals and the isolated cottage hospitals, you must have the small hospitals in large cities and fill them with city patients, an experiment that has never been made. The idea of self-contamination by self-gen-

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\*It was claimed that Dr. Kennedy in giving this number as 52,126, vitiated all the calculations into which it entered; but it appeared that adding up under each head the number for each of the five years, his mistake was to add also a sixth quantity, the average per year, which did not affect the result.

eration of the poison and its reabsorption is mere assumption. What is the period of incubation? I have seen women shiver 14, 16, 17 and 20 hours after delivery. When was the poison absorbed in such cases? Evidently before they entered the hospital. I have seen symptoms of the disease before delivery. Dr. Braun, of Vienna, told me he had seen thirty-six women attacked with metria before delivery. The Munich hospital, a very large and elegant new building, with new beds, new blankets, new sheets and a new staff of nurses, had an outbreak of puerperal at their first take-in of patients. That the absorption of the contagion of metria is not in direct proportion to the number of parturients cohabiting, is proved by the hospital registry for the several years. 1813-25-26-33-34.\*

"The great mortality of the last fifteen years is fully explained by the fact that during that time there has been an enormous, an unprecedented amount of epidemic and zymotic disease. The fewer the deliveries in such an institution as the Rotunda, the greater is the death rate, because when a puerperal epidemic sets in the community is alarmed; those who are most susceptible of the disease enter the hospital; those least susceptible of it stay at home; the hospital is closed perhaps for weeks, and the annual report shows an enormous diminution of patients but a fearful increase of the death rate. I have never seen an instance during the whole of my mastership in which I could say that one patient took metria from another. I have seen one, two, or even all the patients in a ward seized simultaneously, but then there was no time for tracking the disease, no period of incubation. I have seen women on each side of a puerperal patient make excellent recoveries. The epidemic influence seizes upon the patient before she enters hospital, and is latent until delivery lights the smoldering fires. The idea that patients in fever, and affected by other contagious diseases, should not be admitted into a general hospital has been refuted. The statistics of the Vienna lying-in hospital show that metria has usually existed at the same time in the city as in the hospital; that sporadic cases frequently occur in the various wards; that women often show symptoms of the fever before or soon after delivery; and that the children show symptoms or marks of the fever, and usually die. Dr. Johnson, of Kilkenny, in a letter to me on this subject, says: 'I shall here mention that a very remarkable and deadly epidemic of puerperal

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\*See last number.



inflammation traversed the course of the river Barrow, some twenty years ago. It was very fatal, and seemed to follow the course of the river, seizing on parturient women of all ranks of life who lived within a considerable distance of the stream on either side. It led to considerable mortality in Carlow and about Bagnalstown, and appeared to follow the course of the river, much as epidemic cholera has been observed to do.' "

Dr. *W. H. Sawyer*, professor of midwifery in the Royal College of Surgeons, and master of the Coombe hospital, said: "No more important subject ever has or ever will occupy our attention than that now before us. The founder of this society, the venerable author of the paper we are discussing, the esteemed and admired teacher of myself and most of you, comes before us positively alone, not for reformation nor alteration, nor suggestion, nor sanitary improvement, but for destruction. The Rotunda has been grandly represented in this discussion, and since I have been charged with being the involuntary homicide of three out of every four patients who have died in the Coombe during my connection with it, for the last twenty-two years, I am thankful for this opportunity. On the last evening, I had my old pupil the Lord Mayor here. He said, 'You are all down on poor Kennedy.' I replied, My Lord, there never was a master of the lying-in hospital, or a practitioner of midwifery that has more claims to the respect and honor of his brethren, than Dr. Every Kennedy, but in proportion as a man holds a high position, if we consider his doctrine erroneous, we pitch into him, and the harder we hit him, the more we show our respect and affection for him. I will just quote one point—but I believe I forgot my spectacles."

Dr. *Kennedy*: "Will mine be of any use to you?"

Dr. *Sawyer*: "Well, really, Doctor, thank you, I am afraid we don't see through the same glasses."

Dr. *Kennedy*: "More is the pity."

Dr. *Sawyer*: "More is the pity. Dr. K. says here that all he has done in his paper was to endeavor to throw light upon this subject, after forty years' experience, and he thought it unreasonable that one gentleman should have expressed a wish that he had considered it longer. Moses wandered in the wilderness forty years, and was then permitted to see the promised land, so my respected friend"—

Dr. *Kennedy*: "You mean Moses?"

Dr. *Sawyer*: "He has looked out upon the promised land and

seen Rutland square covered with huts. Now fancy the master dodging about in the rain on his morning rounds among those huts, for they must not be in any way connected, with his assistants and midwives and scores of students. I hope the governors will provide umbrellas for the crowd; and then too there must be a telegraph, and I hear it say in quick succession: 'No. 1, hemorrhage;' 'No. 30, craniotomy;' 'No. 3, forceps;' 'No. 25, turning.' The plan can not be put into practice. Already the inhabitants of the square are objecting to Dr. Johnston being allowed to furnish them gratuitously with music. This plan of huts has been very contemptuously spoken of. I do not for a moment insinuate what they were called, but I do say they would look like a rabbit warren, without the connecting corridor which the warren has for the convenience of the inhabitants. We all of us admit that the isolation of women in parturition, is one of the most desirable things to be effected. I don't object to the theory, as a theory, but it is not practical. It is charged that in the Coombe, three out of four die that should not, and in the Rotunda—and that is the only consolation I have—eight out of nine die that should not. 'Saul hath slain his thousands, and David his ten thousands.' You, gentlemen, are my jury, give me your verdict and I will abide by it. And this point of isomerism, that one grandparent of zymotic diseases being developed into an awful family of children"—

*A member*: "Twins?"

Dr. *Sawyer*: "Triplets. There is certainly something antiquated as to the treatment proposed in this paper. That part of it must have been composed 30 years ago, and was then very good. Debility is now the order of the day. At the Coombe, without saying anything about his theories of the origin of metria, which are as numerous as the days of the month, we use Dr. Graily Hewitt's supporting treatment. The question is between the deaths within and the deaths without the hospitals. I am prepared to show how the Coombe is doing its work and to demand that something better be given us, or that the hospitals be let alone. I have here copies from the books of the Coombe hospital for the years 1861-8 inclusive. There were admitted into the hospitals during those years 3,717 labor cases. Of these 54 died from all causes, or 1 in 69. Metria in some of its varied forms caused the death of 30; hemorrhage, convulsions, etc., that of 24. Of these 54 deaths there is a most remarkable amount of complicating causes turn-

ing up to prevent natural labor, which I think will greatly modify your opinion of our death rate. Of these 54 cases, 8 were forceps, 5 retained placenta, 5 version, 3 bronchitis and 4 were admitted in a dying condition.\* But the statistics which I have prepared must be suppressed since the master of statistics, Dr. McClintock, has so admirably replied to the statistics of the paper before us. I think Dr. Kennedy might well exclaim 'Confound him; an I thought he had been valiant, and so cunning in fence, I would have seen him damned ere I'd have challenged him.' Do you think this discussion will stop here? Dr. Kennedy replies certainly not, and I warn you not to sleep over it, for 'there's a chiel amang ye takin' notes and gude faith he'll prent them.' The contagion of zymotic disease among horned cattle may be interesting in this connection. Her Majesty's veterinary surgeon, Dr. Hugh Ferguson, said to me lately, that 'All I would have to do, is to throw my coat, in which I had examined a diseased animal, amongst a byre of cows, to give them all. puerperal.' He also writes to me to-day that 'puerperal fever among cows is so highly infectious that it can be carried in the clothing of the attendants almost any distance. The malady frequently occurs totally independent of the influence of contagion or infection; but once generated, no matter from what cause, can be conveyed to other parturient animals of the same kind, even through the medium of inorganic matter, but more particularly by such animal products as are used for clothing purposes. It is a ques-

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\*The complications in these 54 deaths were:—1, forceps, diffuse bronchitis; 2, forceps, convulsions, primiparæ;—3, forceps, peritonitis;—1, forceps, phlebitis, idiot;—1, forceps, typhus fever when admitted;—1, craniotomy, ruptured uterus;—2, craniotomy, peritonitis; 2, version, convulsions;—2, version, phlebitis, one came to hospital in an open cart, five miles, in a state of coma, and had adherent placenta;—1, version peritonitis;—1, mania, primipara;—8, puerperal fever, in two it set in soon after labor, one had severe accidental hemorrhage before admission;—2, syncope, one after a long walk and quick labor, the other had adherent placenta;—1, puerperal mania;—1, hemorrhage;—2, debility from starvation;—2, fever, dying when admitted;—5, peritonitis, one epileptic, one twins;—1, convulsions;—2, phlebitis, one adherent placenta;—1, hysteritis, mania before death;—1, cholera, not in labor;—1, ruptured uterus;—1, typhus fever;—3, bronchitis, one primipara and convulsions, one had the disease when admitted;—1, placenta prævia, undelivered;—1, subacute peritonitis, placenta adherent;—2, cephalotripsy, one exostosis;—1, evisceration, pleuritis;—1, pyemia.



tion yet to be decided whether the infectious principle of puerperal fever generated in one kind of animal can be transmitted under any circumstances to a parturient animal of a different kind.'

[TO BE CONTINUED.]

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*Art. II.—Bright's Diseases of the Kidney.*

By W. J. CONKLIN, M. D., Ass't Physician S. O. L. Asylum.

Read before the Montgomery Co. Medical Society, April 7, 1870.

GENTLEMEN: The present paper is not presented to the society as the fruit of clinical experience, but simply as a faithful canvassing of modern pathologists: a resume of the history, pathology and treatment of Bright's diseases of the kidneys.

The kidneys are so to speak, the principal scavengers of the body. Any departure of these blood purifiers from their normal physiological action, through which they fail to remove those oxydised nitrogenous principles, the debris of the nutritive process, deteriorates in that degree the pabulum of the entire economy. So intimate is the relation between the blood and urine, and so complemental are the changes in the one to the changes in the other fluid, that it may be stated almost with the force of an axiom: The urine's gain is the blood's loss. Of course, it must be constantly borne in mind that the factors of the formulæ furnished us by the physiologist with which to work out the problem of the vital processes, have not that fixedness of value which belongs to mathematical formulæ. Thus, though an analysis of the blood or urine to-day should give a certain percentage of ingredients, to-morrow's analysis might be plus a small percentage of one ingredient, or minus a small percentage of another, without crossing the boundary from physiology to pathology.

HISTORY.—Just how early in medical history the condition of the kidneys was consulted for the explanation of dropsy is involved in some obscurity. Hippocrates, in the well-known aphorism: "When bubbles appear on the surface of the urine, they indicate that the kidneys are affected, and that the disease will be protracted," is supposed by some authors to refer to Bright's diseases. Ætius, who flourished in the sixth century,

associates dropsy accompanied with "*Urina subtilis pauca in quantitate*," with induration of the kidneys.\* Alexander,† who lived shortly after Aëtius, observes: "Dropsy is oftentimes dependent on kidney disease," and remarks the frequency with which it is co-existent with phthisis. Ahazes,‡ one of the most distinguished of the Arabian school, and the first to describe small-pox, in the ninth century, considered dropsy as generally depending upon induration of kidney, or debility of kidney, so that they no longer attract the aqueous superfluity of the blood.

Dr. Adams,|| in his commentaries, has the following passage translated from Actuarius, the last of the early Greek writers: "When substances, the effect of melting and resembling spider's webs, float in the urine, they indicate either that the kidneys are diseased or that the system is in a state of atrophy from wasting." I am unable to consult the original, and the value of the passage depends upon the word translated "melting." If it does mean the application of heat, this is the earliest record of albuminous urine. In 1761, Morgagni§ distinctly pointed out the renal origin of dropsy, and gave the first authentic intimation of convulsions as a sequence of kidney disease. A few years later, 1770, we have the first undoubted discovery of albumen in the urine, by Coturnius. In searching for proof of some fanciful theory of sciatica, Coturnius placed his test-tube over the lamp and beheld his fluid urine become "*coacti ovi albumini persimilem*." ¶ About the same time, Fordyce remarked that the kidneys, if relaxed or stimulated, allowed the passage of chyle, serum, coagulated lymph or red blood, but specifies no causes. By and by, Darwin made the ropiness of the urine and its coagulability by heat, distinctive of his third species of diabetes." ¶ In 1797, Cruikshank showed the relation between coagulable urine and dropsy. The investigations of Cruikshank, supported soon after by Nysten, Wells of Guy's Hospital, and Dr. Blackall, began to give shape to the crude data of the earlier authors. It was reserved, however, for Dr. Bright to interpret more fully the value of the symptoms now bearing his name, and his published cases in 1827 gave direction to all subsequent inquiry, and foreshadowed the brilliant discoveries since made in this department of pathology.

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\* *Edinburg Medical Journal*, January, 1856, p. 606.

† *Paulus Aegineta*, by F. Adams, p. 575.

‡ *Paulus Aegineta*, vol. 1, p. 576.

|| *Ibid*, p. 352.

§ *Edinburg Medical Journal*, January, 1856, p. 607.

¶ *Ibid*.

Since the day of Dr. Bright, renal physiology and pathology have received that patient investigation which their importance richly merits. The test-tubes of Prout, Jones, and Traube; the microscopes of Johnson, Virchow, and Beale; the clinical investigations and scalpels of Roberts, Dickinson, Frerichs, and Stewart; the thermometer and ophthalmoscope, have unraveled the causes, interpreted the systems, and designated the treatment of renal diseases with great accuracy. The harvest of memoirs and treatises, although an outgrowth and an evidence of the advances made in renal pathology, is a no less positive proof of the chaotic opinions entertained by the profession in regard to them.

This confusion has arisen in part from the natural obscurity of renal diseases; partly from the unfortunate christening, since the name includes conditions totally distinct in origin, history, and termination; and largely from erroneous views of the anatomy and physiology of the normal gland.

Modern pathologists, with some of the German school dissenting, are now generally agreed that linked together by the common characteristics of albuminous urine and dropsy, we have several diseases, each with a biography peculiar to itself, affecting different anatomical structures of the kidney, and distinct in ætiology and symptomatology. *A priori*, we should expect this to be the fact, inasmuch as the different structures of the kidneys are as prone to take on morbid action as the different structures of other glands; more prone than many, owing to their greater functional activity. The different diseases of the heart, lungs, and brain are not confounded together, because they manifest their presence by common signs. Just as jaundice is traceable to different lesions of the liver, and its secretory apparatus.

The idea is rapidly growing in favor that the kidneys are not mere passive filters, but organs vested with oxydising and formative powers. The investigations of Oppler, Perls, Zalesky, and Beale, would almost prove that the kidneys are glands in the truest sense, not strainers—that urine is a secretion, not a leakage. The ideal kidney is represented by its prototype the Woolfian body of foetal life, and consists of a mass of convoluted tubes terminating at their free extremities in small rounded dilatations; each dilatation enclosing a network of capillaries, the analogue of the adult malpighian tuft. The tubes of the cortical portion of each kidney have been estimated at 2,000,000 in number, thus furnishing, according to Vierordt, a secreting surface of 44 square feet.



The necessity of this extensive surface is seen when it is remembered that, according to Brown Sequard, all of the blood of the body passes through the capillary system of the kidney 150 times in the 24 hours, to be unloaded of its cargo of effete material.

The power of any gland resides in its epithelial cells, and the distribution of these cells in the kidney, viz: the naked condition of the glomeruli, and the spheroidal cells lining the tubuli uriniferi, furnishes the key to their depurative action. The *modus operandi*, as given by Beale\* in his late work, and which differs but little from the prevalent belief, is: "The blood surcharged with the nitrogenous extractive matters is unloaded in the malpighian tuft of its excess in water containing a large amount of oxygen. The blood, poorer in water but richer in solid constituents, passes into the intertubular capillaries, and here through the germinal matter or cells lining the adjacent tubes, is metamorphosed into formed material, which is further oxydised and washed out by the water escaping from the malpighian tuft. Goodfellow,† in his *Lectures on Diseases of the Kidneys*, differs from the above, and states: "The urinary constituents are separated directly from the malpighian capillaries, and that whatever constituents of the serum, or of the blood are normally transuded through the walls are absorbed by the epithelial cells of the tubules, or by some other agents, before the convoluted tubes become continuous with the straight or simply excreting ducts."

CLASSIFICATION.—The classification of the diseases included under the name of "Morbus Brightii," are almost as numerous as the writers upon these diseases. That a diseased kidney should exhibit protean forms in running its natural course, or that its course should be modified by the supervention of other forms of disease than the one by which it was originally attacked, is but the history of all diseased organs. Yet the hybrid thus produced is not considered a disease *sui generis*.

Virchow was the first to adopt that simplest of all classifications based upon the anatomical structures affected. Stewart‡ and Dickinson|| have in their recent works, with slight alterations, adopted the classification of Virchow into diseases of tubular epithelium—bloodvessels and intertubular connective tissue. John-

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\* *On Kidney Diseases, etc.* 1869.

† *Lectures on Diseases of the Kidney, etc.*, p. 152.

‡ *Bright's Disease*. T. Grainger Stewart, 1869.

|| *Pathology and Treatment of Albuminuria*, by W. H. Dickinson, 1868.

son and Beale, however, deny the presence of any intertubular tissue in the kidney, and pronounce that tissue so considered by others as merely the atrophied remains of tubes and capillaries. We have here a mere question of accuracy in observation, with the weight of numbers in favor of the view above taken. Beale, after entering a strong protest against the triple nosology, proceeds to describe five pathological conditions, which may exist independently of each other: 1. Contracting and wasting of kidney. 2. Enlargement of kidney. 3. Fatty enlargement. 4. Fatty contracting kidney. 5. Albuminous degeneration. High as is his authority in microscopical and chemical investigations, he seems to consider in this classification, conditions *per se*, distinct diseases which are merely symptoms or accidental complications. As for instance, we would banish the fatty degeneration from the pale of Bright's diseases, and consider his third division, fatty enlargement, as a later stage either of the tubular or amyloid varieties; and his fourth class, fatty contracting kidney, a later stage of the granular degeneration.

Dr. Flint, in an essay in the *N. Y. Medical Journal* for July, 1869, on "The Prognosis of Bright's disease," adhering to the classification given in his practice, says: "The fatty kidney has been rather unceremoniously thrust out by some pathologists," and that the "characters, both gross and microscopic, of the kidney, are highly distinctive."

Let us briefly examine the evidence.

It is well known that one of the most common sequels of inflammatory action, is the fatty change. In a large proportion of these renal troubles, which can be traced to cold or exposure, or whatever the cause when the severity of the inflammation leads to deficient oxydation, the epithelium almost invariably becomes loaded with oil. This is not the primary lesion, but a secondary change in point of development as it is in clinical importance; the result of the defective oxydation of the nitrogenous elements. From the same cause the fatty change is a constant result of the injection of phosphorus. Bence Jones\* found the liver and kidneys always, and occasionally the heart, to afford evidence of the commencing change as early as the second day after the injection. Dr. Murchison† writes, "A large accumulation of oil may

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\* *Lectures on Pathology and Therapeutics*, p. 178.

† *Diseases of Liver*, p. 45.

so interfere with the circulation as to produce an anæmic condition of the gland itself, but not to such an extent as to cause ascites. Even in extreme cases, bile continues to be secreted and its secretion is not impeded or arrested.

Kolliker found that if, in the same litter of animals, some were permitted to suckle, and others made to fast, that the livers of the former class, at the expiration of a few hours, showed a palpable accumulation of fat. The livers of certain fish abound in oil; as for example, the liver of the cod, the great pharmacist of the profession. Mr. Simon\* says, "You never see the kidney extensively affected in this way, without observing simultaneously that there exists some considerable destruction of tubules, or some serous or fibrinous infiltration of the gland, for which the presence of fat in its endothelium would be insufficient to account." He further tells us that the kidneys of metropolitan cats—cats that have enjoyed the luxurious ease and high living of London life invariably contain oil; and though far greater in degree than any similar accumulation witnessed in the human kidney, yet it is unattended with destruction of epithelium or tubes, and the functions of the glands seemed as well performed as in their less fortunate brethren of the rural districts. Beale, though recognizing the fatty kidney as a distinct form, describes a similar condition of kidney among brewery cats, living on hydro-carbonaceous food. Many of his analyses show fully one-third of the solid matter to have been fat, and yet, as the general health seemed in no way compromised, the inference is that the blood was properly depurated.

Dr. Ormerod† holds the following language: "In the living body, fatty degeneration is invariably preceded by other changes in the structures which ultimately become fatty." Handfield Jones‡ records, "The deposition of oil in the degenerating epithelium, we hold to be accidental, and not in any way essentially modifying the morbid state." According to Roberts|| "The presence of fat in the renal substance and in epithelium of tubes is not special to any one type of renal disease, but it is associated with anatomical changes of the most various kinds."

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\* *General Pathology*, p. 139.

† *Bartholomew's Hospital Reports*. Quoted in *Dublin Quarterly Journal*, May, 1869.

‡ *Jones and Seveking's Pathological Anatomy*, p. 559.

|| *Urinary and Renal Disorders*, p. 229.



Dr. Wm. B. Lewis,\* in his recent monograph, on the subject of fatty degeneration, says: "It is a legitimate consequence of cell growth, and may make its appearance in any form of renal lesion in which protracted interference with the normal condition of the tubes obtain." Reinhardt has recorded two cases in which post-mortem revealed very fatty kidneys without any symptoms of Bright's disease manifesting themselves.

Steward adduces a case in which the kidneys presented the typical degeneration at autopsy, but with the utter absence of symptoms pointing to the change.

In 68 healthy kidneys, in all of which no symptoms of renal trouble were present during life, analysed by Dickinson, the epithelial cells of 25 contained oil. In 30 cases of death from chronic disease other than renal, the renal epithelium of ten was found to be fatty, and this agrees with the well-known fact that in protracted disease, the epithelial cells in all portions of the economy contain free oil globules.

From these data we conclude:

*First.* A large accumulation of fat in renal structure or epithelium is not incompatible with a proper performance of function.

*Second.* It is a secondary change, dependent upon deficient oxydation—a sequence—not a type of disease in itself, but a symptom of any one of the three types of morbid action already mentioned.

*Third.* It makes its appearance generally in the later stages, but in tubular disease is often seen early in its history and indicates some epithelial disturbance.

We now proceed to a brief discussion of the individual diseases.

*First.* The epithelial disease, with the synonyms of inflammatory form; tubal nephrites; large, smooth kidney; acute desquamative nephrites; croupous nephrites, is essentially an inflammation of the secreting cells lining the tubuli uriniferi. This, when uncomplicated with other forms, runs its course without serious alteration in the other structures of the gland. As in bronchitis or croup of larynx, to which this form bears many points of resemblance, the morbid process consists in an exaggeration of normal action of the secreting cells. There is, however, this difference between the diseases mentioned, as stated by Niemeyer,†

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\* *The Pathology of Bright's Disease*, 1869, p. 14.

† *Text-book of Practical Medicine*, p. 16.

"that the epithelium of the uriniferous tubules takes a more active part in the nutritive disorders attending acute Bright's disease, than is taken by the epithelial cells of the larynx and air vesicles in laryngitis and croupous pneumonia." This we look for. As a general rule, those substances which are excreted by a gland are direct excitants of that gland. The kidneys being the gateway through which the greater portion of those nitrogenous matters that have served their purpose in the economy must pass out, are prone to take an increased action, whenever the blood becomes charged with this debris, excessive in quantity or unnatural in quality. This increased action necessitates an unnatural cell growth. This is purely a conservative action, an effort to restore the equilibrium between the deleterious matters and the blood. So long as the oxydation and removal is affected, the cells labor on in their unequal task until the blood is renovated and a speedy recovery results. The malpighian tufts may fail to eliminate enough water to keep the convoluted tubes free, then the hyper-increase soon blocks up the tubuli, paralyses the epithelial cells and uremic symptoms speedily appear. Testimony, corroborative of this view, is furnished by the ætiology of the disease.

ÆTIOLOGY.—The causes as generally specified are :

1. Those diseases which generate or depend upon a blood-poison, as scarlatina, measles, diphtheria, cholera, typhus.
2. Circumstances which compel the kidneys to do the work of other glands, as exposure to cold, etc.
3. Renal irritants, misuse of diuretics.

In the second class of causes the secreting cells are over-stimulated to remove an excess in quantity. In the other classes there is an unnatural quality to be removed—a blood poison or virus generated by a foreign substance introduced into the blood. The prevalent opinion that would make the albuminuria dependent upon the extension of the exanthem or desquamation to the secreting surface of the kidneys we deem untenable.

*First*—Because of the well-known fact that the scarlatinal poison may explode at any portion of the body, as the throat affection, the "scarlatinal bubo" of Trousseau, inflammation of various joints, stiffening and contracting of muscles.

*Second*—That the milder cases of scarlatina as pointed out by Graves, are more frequently followed by renal disease. We are thus enabled to offer a better explanation of those cases of "scarlatina latens" in which the diagnosis is based upon the

appearance of the characteristic sequelæ, after exposure to the disease, viz: that the kidneys become irritated in their efforts to eliminate the "materies morbi" which material is insufficient in amount to produce its usual manifestations.

*Third*—From the constancy in which renal lesions attend scarlatina. Says Niemeyer, 'Scarlatina is localized in the kidney just as often as in the skin or mucous membrane of the pharynx.' Dr. Bigbie believes albuminuria to be present at some time in all cases. Newbigging arrives at a similar conclusion from his cases. Abeille found albumen in the urine of one-third of his cases Flint in one-half of his.

*Fourth*—The frequency with which albuminuria accompanies the non-eruptive diseases. The typhoid state of cholera is mentioned by Niemeyer as a cause second only in importance to scarlatina. Rosenstein found no less than twenty-three per cent, of the cases of Bright's disease in the Dantzic hospitals traceable to antecedent ague.

*Fifth*—Because the disease is bilateral, both glands being affected in about the same degree and in a similar manner.

**PATHOLOGY.**—If a kidney affected with intertubular disease be examined it will be found enlarged and the surface smooth. In the early stages marked congestion exists as shown by the network of capillaries that ramify over its surface, giving a uniform red appearance. "If cut a bloody adhesive liquid bathes the surface." The malpighian bodies stand out as prominent red dots. The tubes of the cortex are to a greater or less extent filled with a dense fibrinous material containing free epithelial cell and granular matter. Later the redness disappears and the gland presents another appearance. The microscope now reveals an exaggeration of the condition just described. Sooner or later fat cells are seen, which may so increase as to cause the condition designated by some authors as "the large fatty kidney." The tubules present different conditions, some are shorn of their epithelium, others vastly distended with hyaline matter with, perchance, free cells or blood corpuscles entangled in its meshes. Steward describes another stage in which there is a shrinking of cortical substance and sparse depressions of surface. Dickinson denies this and probably correctly states "the small smooth kidney" to be caused by the supervention of the amyloid form.



**SYMPTOMS AND COURSE.**—This is essentially a disease of early life, rare after thirty and almost unknown after forty. Like all other inflammations it may run an acute, sub-acute, or chronic course. Dr. Owen Rees points out that a valuable precursor of nephritis exists in the presence of the blood extractives in the urine. The escape of the extractives shows that a constant and important drain is going on from the blood and is to be regarded as a warning of approaching albuminuria. These may be detected by the addition of tincture of galls to the urine which immediately precipitates the extractive matters. In five or ten minutes the earthy and potash salts will be thrown down by the spirit contained in the tincture: so it must be remembered that the precipitation of the extractives occurs immediately after adding the tincture.

Chilliness with headache and pain over the region of the kidney generally announce the advent of total nephritis. According to one author, "vomiting is a more constant token of incipient disease of the kidney than either fever or pain."

The urine is invariably reduced in quantity. The amount of reduction is an index of the severity of the disease. In extreme cases it may be wholly suppressed; in others reduced to 2 or 3  $\bar{3}$  in the 24 hours, while the patient is tortured with a constant desire to make water.

The solid constituents of the urine are decreased. Albumen and fibrin are constantly present. The fibrin, true to its nature, coagulates in the tubules, locking up in its grasp any free cells, granular debris, blood corpuscles, or fat cells, that may be found there, and which, interpreted by the microscope, gives an accurate record of the morbid processes occurring in the gland. The casts of special clinical importance are:

1. Hyaline, or simple cylinders of fibrin.
2. Epithelial, in which distinctive spheroidal cells are seen.
3. Granular, where the shed epithelium has become disintegrated.
4. Fatty and blood casts.

*Dropsy* is a very constant and often the earliest of the objective symptoms; coming on first as a mere puffiness of the eyelids or œdema of the ankles, it evinces a decided migratory tendency, and finally involves the whole body. The tubes may discharge their pluggings and the urine become abundant, resulting in an abatement of all the symptoms. On the other hand, with the tubules occluded, smothered, so to speak, the secretion of urine is pre-

vented, its components are retained in the blood, lighting up inflammation of the serous membranes, or coma and convulsions may close the scene.

**TREATMENT.**—Tubal nephritis is decidedly amenable to treatment. The pathological condition readily furnishes the indication to be fulfilled, *i. e.*, to keeping the tubes clean. With secretion free the morbid process is self-limited. Steward writes: "I have satisfied myself that when the old disorganized epithelium of the tubules has been removed, a new epithelium is formed; but such a formation can not take place unless the old be carried away."

Before the true nature of the disease was recognized, diuretics were much in vogue. When it became classed among the inflammations they were discarded. Depletion, the hot air baths of Osborne, and purgation, became the sheet anchors. The opinions of the profession have undergone another revolution, and diuretics are assigned their true place at the head of our remedial agents. There are certain remedies which act by increasing the watery portions of the urine, without altering the solids. Water stands at the head of these, and especially in the hands of Dickinson and Stewart, has proven most efficacious. They administer from 1 to 4 pints of spring water per day, according to the exigencies of the case. The main objection urged against this mode of treatment is that it still further irritates an organ already in a high state of irritation." But is the objection well taken? Recalling to mind points already passed over, we find the glomerulus engaged solely in the elimination of water. Hence the remedy is addressed especially to the glomerulus. A profuse cell growth we have already seen to be the very essence of the disease; the glomerulus then being destitute of cells, is not the seat of disease. Through their administration we gain a two-fold advantage: 1. Local depletion; and 2. A physiological clearing out of the tubes.

The vapor of the oil of juniper, so highly recommended by Simpson, has proven an efficacious remedy in the hands of Stewart. He administers it by dropping the oil upon a sponge previously wet with hot water, and having the patient inhale the vapor. Dr. Harley, of King's college hospital, has laid great stress upon the virtues of belladonna. Early in the disease a marked diminution of albumen was noticed within 48 hours of its administration; and at the end of the sixth or eighth day, all trace had disappeared. He recommends a medium dose of the succas or fluid extract, night and morning. Dr. Osbaldeston reports

several cases of albuminuria, attended with convulsions, which were promptly relieved by the administration of camphor.

Huchenmeister found a rapid diminution of albumen in the urine to follow the administration of lime water. If urinic symptoms or excessive dropsy threaten to destroy life, hydragogue cathartics and hot air baths should be resorted to for temporary relief; but their prolonged use in a disease with such marked anæmic tendencies is, to say the least, ill-advised. At any rate, but a very small proportion of the solid constituents can be thus eliminated, while the misappropriation of water and consequent occluding of tubules can not but favor the destruction of the gland. After the force of the disease is spent, tonics are indicated. The muriated tincture of iron, on account of its combined diuretic and tonic properties, is most valuable.

## II.—DISEASES OF THE INTERTUBULAR CONNECTIVE TISSUE.

There is great diversity of opinion as to the nature of the morbid process resulting in the parenchymatous nephritis, gouty, contracted, cirrhotic or granular kidney. We prefer the name granular because it describes the appearance of the kidney, always found in a well-marked case of the disease. The common name, cirrhotic, is incorrect as applied to the kidney; the word is derived from "kerros," meaning yellow, which is descriptive of its kindred disease in the liver, in which the secreting cells are filled with a yellow pigment, not found in the so-called cirrhotic kidney. The German pathologists, under the lead of Frerichs, consider it merely a stage of the smooth white kidney already described. In opposition to the generally received opinion that accredits this form to a morbid increase in the interstitial tissue, we have Dr. George Johnson and Beale, the former considering all renal disease as essentially a fault of the secreting cells, seeks for the trouble within, not without the tubes, and considers the primary phenomena to be a disintegration of the glandular epithelium. In support of this view he adduces the vascularity of glands so affected, from which they have received the name of "red granular kidneys."

As rebutting evidence we have the testimony of many authorities, that in the earlier stages when death from other causes has afforded an examination, there has been no morbid alteration of



the secreting cells. True, some of the tubes may be filled with free epithelium, others with a transparent fibrinous material; and still others may show an accumulation of oil globules, yet the spheroidal cells as such, show no departure from their normal condition, more than would be produced by the overcrowding and pressure to which they are subjected.

Again, whenever a kidney, suffering from either of the forms of chronic disease, is attacked during its progress with intratubular inflammation characteristic symptoms at once announce the advent and disappearance with the dying out of the inflammatory action.

Dr. Beale\* sums up the results of his investigations thus: "I have never seen fibrous tissue in healthy adult liver or kidney. In embryonic structures one is struck with the absence of such tissue. At this period of life the tissues are soft and most in need of support, yet in the kidney of a child only a trace of such tissue is found." He considers the substance as described by others as intertubular connective tissue to be "mere crumpled, creased, and collapsed membranous walls of secreting tubes and capillaries." He traces the parentage of the disease to a fault in the glandular and vascular elements. We adopt the histology as given by Dickinson and Stewart, because it best explains the appearances of the gland and the symptoms. We can hardly understand how the granulated appearance of the surface can be due to distension of the tubules, or how tubular distension can change the "soft and tender" gland of the early stages into the "exceedingly firm and tough" condition of the later stages.

Cysts, which never occur in the course of tubal nephritis, and less often in the amyloid form, furnish corroborative testimony. That cysts should be formed by dilation of simple epithelial cells is to say the least highly improbable, for the thin cell-wall could not sustain the pressure; and Beale, in his recent writings, even excludes the wall as a component of the cell. On the other hand, this fibrous material which is poured out between the tubules, after awhile begins to contract, and in so doing acts as a ligature to the tubules in its course, thus isolating portions in which fluid accumulates. The seclusion of the tubule may also cause dilation of the capsule of the malpighian body.

**MORBID APPEARANCE.**—A kidney in an advanced stage affords a very characteristic appearance. The gland is reduced in size,

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\**Loc. cit.*

often weighing but 2 or 3  $\frac{3}{4}$ , due mainly to shrinking in cortical substance, and has lost its regularity. The surface is studded with small hemispherical granulations; between the granulations are crowded the superficial capillaries contrasting strongly in color with the bloodless cones. Cysts are sometimes visible on the surface; abundant both in bones and cortex. The microscope shows an increase in fibrous stroma, which surrounds malpighian bodies, blood-vessels, and tubules. On section, a fibrous ring is seen encircling them. From the depression upon the surface, which is caused by the shrinking of this fibrous growth, its course can be traced by the shriveled and secluded tubes.

**ÆTIOLOGY.**—Granular degeneration of the kidneys being a chronic disease, we seek for its parentage not in transient influences, but rather in those of a continuous nature. The frequency of its occurrence in persons past the meridian of life, and in those constitutions prematurely broken down by hard work and bad hygienic surroundings—its general coincidence with other degenerations, all seem to indicate the renal to be but one piece of general bodily degeneration. The causes generally assigned are: (1.) The prolonged use of alcoholic liquors. (2.) The gouty diathesis, from which Ford gave it the name of gouty kidney, and lead poisoning. 3. Prolonged venous congestion of kidney as in successive pregnancies and valvular lesions of heart.

**SYMPTOMS.**—Granular kidney is a disease of adult life. Almost unknown before the age of 20, rare before 30, it has its maximum frequency between 40 and 60. Insidious in its origin it creeps on grasping and crushing tubule after tubule until the functional activity of the gland is seriously impaired before any of the special symptoms become manifest. Tracing the history back, you may find that the patient has for some time presented a sallow anæmic appearance, suffered from dyspepsia, has been despondent, and had occasional fits of vomiting.

Cases are on record in which the disease has continued many years, in one well authenticated, as many as twenty. Pain in the region of the kidney is rarely present. The first symptom noticed, unconnected with the general failure of the powers of life, is generally an increase in the secretion of the urine, more observable at night when the horizontal position is long assumed. An examination of the urine reveals the presence of albumen and casts, though less in quantity and number than in tubal nephritis. The urine is of a bright clear color, often amounting to 90 $\frac{3}{4}$  in the 24

hours in the earlier stages, but in later stages, owing to the damaged condition of the gland, and oftentimes to the supervention of acute nephritis, the secretion may be reduced to 8 or 10 $\frac{3}{4}$ . The specific gravity is lower than normal, ranging from 1007 to 1015.

Dropsy is not a constant attendant on this form, and as long as the urine is abundant, very seldom occurs. In 19 out of 68 cases, in which the diagnosis was confirmed by autopsy, dropsy never was present. Its presence speaks of 1, extensive structural lesions; 2, the addition of tubular disease; or, 3, it may be caused by heart disease which is dependent upon the kidney affection. Clinical observation has established the fact that kidney and heart diseases are frequently associated. Valvular lesions, especially lesions of the mitral valve, through the mechanical obstruction offered to the free circulation of the blood, may cause congestion of the kidney, which may end in granular disease. But besides this as stated by Dr. Flint in the paper already alluded to, "Simple hypertrophy of the left side of the heart, that is hypertrophy not dependent on valvular lesions, is so extremely rare, exclusive of its occurrence in connection with renal disease, and is so frequent in this connection, that the association must be considered as involving a pathological relation." Flint considers this relation to be a cause rather than an effect of the renal disease, and would look upon the hypertrophy as compensatory or conservative. Others, however, look upon it as an effect of the renal lesion. Traube considers it caused by a derangement in the circulation of the gland. Bright, who is followed by many authorities, thought it due to an alteration in the blood, through which greater heart-power is required to propel it through the capillary system of the kidney.

An atheromatous condition of the arteries is one of the frequent companions of granular kidney. Dickinson considers it a result of the latter. In some this may be true, but in a majority of cases the two seem to be only parts of that degeneration incident to age. They both occur in the afternoon of life, and when they are found earlier, are indicative of premature decay. As the activities of life wane, and the machinery becomes worn, certain alterations ensue by which the equilibrium is preserved. Diseased kidney induces impurity of blood, and impure blood circulates with difficulty through the capillaries. Hence, a stronger "*vis a tergo*" is needful, and the hypertrophied heart supplies it. The stronger heart propelling the blood in weaker vessels explains the frequency



with which apoplectic seizures are associated with granular disease. Muchet\* records "I am unwilling to accuse the kidneys of invariable participation in the pathogenesis of cerebral hemorrhage, but am strongly inclined to suspect their complicity in many cases. In analyzing the eight cases given in his work in which the post-mortem appearances are noted—in four, the left side of the heart was hypertrophied, vessels atheromatous, and the kidneys gave undoubted evidence of granular disease. In two, the kidneys are described as congested, and the remaining two are pronounced healthy. In six of the eight cases the urine was found to be albuminous.

Dr. J. Huylings Jackson† writes as follows: "It is a thing of extreme rarity to find healthy kidneys and a non-hypertrophied left ventricle (excluding, as regards the heart, those long bed-ridden), at autopsies on patients who have died soon or late after cerebral hemorrhage, and yet have healthy kidneys and arteries but slightly if at all diseased." Mr. Thomas Jones, in *British Med. Journal*, 1862, says that of the 36 cases of apoplexy examined with sufficient care in the dead-room of St. George's hospital, the kidneys of 29 were extensively diseased. The only case of paralysis in the asylum at the present date has the urine albuminous, with the usual symptoms of granular kidney.

The practical deduction is, that the occurrences of any of the prognostics of apoplexy or hemiplegia, which is oftener due to rupture of a vessel than to primary nervous lesions, should cause a close scrutiny of the heart and urine. I might also add, of the retina. Retinitis is of the same chain of changes, and occurs with such frequency that the ophthalmoscope often furnishes quite accurate testimony both in diagnosis and prognosis. Convulsions are much rarer in this than in the acute form, the uremic symptoms generally being those of coma. Undoubtedly, as is urged by Michet, very many of those cases of so-called serous apoplexy, are but the last act in the very fatal drama of granular kidney.

TREATMENT.—The disease involves a permanent lesion of the gland, and it is beyond the power of medicine to restore its integrity. Recovery may take place in so far as the cessation of the morbid process, and should this occur before the functional activity of the gland is too much impaired, the health may not be

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\* *On Apoplexy*, p. 87.

† *Reynolds' System of Medicine*, article Apoplexy.

materially compromised. The treatment is mainly palliative, and may be summed up in a single sentence—remove, as far as possible, the cause and put the system in the best possible condition. A good diet, largely consisting of non-nitrogenous articles to supply the wasting of albumen, and good hygienic surroundings, will often enable them to enjoy a green old age. Dr. Donkin, in the *Edinburg Journal*, and Dr. Niemeyer, both eulogize milk as a remedy. Patients taking nothing but five or six pints of milk daily, underwent marked palliation of symptoms in a few weeks. The dropsy disappeared and the patients regained their health in such a degree as to be enabled to engage with comfort in the ordinary vocations of life. Should this measure prove ineffectual and dropsy or uremic symptoms manifest themselves, they must be combated as in previous disease.

### III.—AMYLOID DISEASE.

The amyloid form is a constitutional affection, chronic in its course, and tracing its origin to long standing disease or protracted suppuration. Unlike the other lesions just passed in review, it is not restricted to the kidneys, but affects alike the spleen, liver, intestines, mucous membrane, in short, every portion of the body through which arteries ramify.

Its primary manifestation is in the transverse fibres of the middle arterial coats. The extensive circulatory system of the kidney, with its clusters of malpighian arterioles affords special opportunities for the gratification of its hungering after arterial coats, and as we would expect, in a majority of cases, the kidneys are either the original seat of the disease, or associated with the change in other organs.

The first departure observable is the enlargement of the malpighian tuft. Gradually the efferent and afferent vessels of the tuft become participants, as shown by the thickening of their walls and consequent loss of calibre; soon the whole arterial system from malpighian tuft to renal artery is involved. Notwithstanding the increased thickness of arterial coat, an abnormal leakage is started, and an effusion between the tubes results, having under the microscope the appearance of fibrous tissue. This tissue, later in the history, may be seen surrounding malpighian bodies, encircling the tubules in all parts of the gland, and can often be traced to the vessel from which it has been poured out.

Organs affected with the disease are in the earlier stages in-

creased in size and weight. Diseased kidneys frequently weighing from 10 to 15 $\frac{3}{4}$ . Murchison has recorded a waxy liver weighing 180 $\frac{3}{4}$ .\*

This increase is attributed by Stewart, partially to thickening of structures affected, but mainly to effusion within the tubules causing distension. The latter cause is probably overrated inasmuch as the patency of the tubes is quite characteristic of the disease, and, again, if the distension were so great, the tubular epithelium should indicate it, whereas the epithelium furnishes, according to some observers, the ideal cell of physiology. This effused material, so freely poured out between the tubes, has a history somewhat similar to that of granular disease. It contracts occluding some of the tubules, cutting others up into cysts, and destroying the smooth even surface of the gland; the granulations, however, do not present that uniformity so characteristic of granular disease. The shrinking may proceed until the cortical portion is reduced to the thinness of a shilling. In extreme cases, Stewart has observed: "I have seen the malpighian corpuscles so closely grouped together as to remind one of a bunch of grapes with the degenerated artery resembling the stem." At this late period in the disease, there is scarcely a possibility of mistaking it, but in the earlier stages the kidney may betray very little departure from normal appearance even when subjected to microscopic examination. In iodine we have the most efficient detective. When a section of the kidney is brushed over with a proper solution of iodine, the deep, cherry-brown of the amyloid deposit, presents a marked contrast with the light yellow stain of healthy tissue. At first the malpighian arteries alone give the reaction and dot the section like "grains of brown sand." From this focus it spreads from artery to artery, and becomes effused between the tubules until the whole organ gives the characteristic color. In view, then, of the importance of noting the change, and the ease of its application, a proper solution of iodine would form one of the essentials of post-mortem outfits.

**SYMPTOMS.**—The two forms of *Morbus Brightii* already examined have their maximum frequency in the two extremes of life. The present form may occur at any age, though with greater frequency between the second and third decennial periods. Persons so affected have generally an antecedent history of chronic dis-

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\* *Diseases of the Liver.*



ease, or prolonged suppuration, and present a peculiar ænemic, waxy complexion, quite characteristic of the disease. From the fact that the superficial vessels alter but little in calibre, persons long afflicted with amyloid disease, can not blush.\*

The urine is invariably increased in amount, the secretion sometimes ranging from 50 to 2003, of a pale color, and with a specific gravity ranging from 1005 to 1015.† On the other hand, Waube insists upon the dark color and high specific gravity of the urine in amyloid disease. Niemeyer confirms the views of Waube, and remarks: "I have been struck not only by the darkness of the urine in amyloid renal degeneration, but also by its unnatural yellowish-brown color; moreover, my colleague, Hoppe Seiler, has shown that such urine contains extraordinary quantities of indican."‡

Albumen increases as the disease progresses from a mere trace to a bulky coagulum. Casts occur during the whole course of the disease, increasing in abundance as the disease proceeds. Those most frequently present are simple cylinders of fibrin, moderate in size, because formed in tubes still clothed in epithelium. The casts often contain oil globules. In uncomplicated cases, epithelial cells are surely found in the urine. The solid constituents all in a greater or less degree undergo diminution; urea to a less, phosphoric acid, to a greater extent than usually occur in the other forms. The increase in the quantity of urine furnished one of the most certain diagnostic points, yet, in the later stages, a diminution may occur, either dependent upon the plugging up of the tubules, or upon the supervention of the tubal nephritis.

Dropsy is a less frequent attendant upon this, than either of the other forms. When it does occur, its access is gradual, the feet and ankles swelling during the day, and resuming their natural size at night. Dropsy coming on while there is an increase in the secretion of urine, is almost a pathognomonic sign of amyloid disease.

As concomitants, we have frequent inflammatory attacks, selecting in point of order, the lungs first, and next the heart. Diarrhea and vomiting are quite generally present, depending upon an extension of the disease to the minute arteries of the intestines

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\* Beale, *Op. cit.*

† Stewart, Ed. *Medical Journal*, August 1864, p. 108. Dickinson, *op. cit.* p. 194.

‡ *Op. cit.* p. 42.

and stomach. The infrequency of diarrhea in other forms of renal disease, makes its presence a valuable aid in diagnosis.

Head symptoms occur less often than in tubular or granular disease. Confirmatory evidence, in suspected cases, should be sought in the condition of the organs, especially the liver, which can be so readily interrogated by percussion and palpation.

One of the most interesting inquiries in the whole range of pathological changes, is: What is the nature of this so-called amyloid deposit, or degeneration? The history of the amyloid deposit well illustrates the mutations of pathological opinions. The study of the deposit as occurring in the spleen, and especially that form known as the sago-spleen, has most advanced our knowledge of it. Hodgkin, in 1832, without expressing any opinion as to its nature, seems to have been the first to recognize this condition. Carswell and Bright also observed it, but considered it malignant in its nature. Rokitansky, in 1842, pointed out that the spleen was not alone the seat of the morbid process, but that the liver and the kidneys were similarly affected; and assigned the latter, under the name of the "lardaceous or baconny (*speckung*)," a distinct place in the nosology of Bright's diseases. Once more the subject relapsed into oblivion. In 1845, Dr. Bennett considered the lesion as merely an advanced stage of fatty degeneration. Frerichs, writing in 1851, ignores the lardaceous kidney. In 1853, Webb found nothing abnormal in kidneys so affected. Dr. Gardner, of Edinburg, in 1848, independently of Rokitansky, assigned it a place among Bright's diseases, and was the first to call attention to the fact that the capillaries were special sufferers, although he did not, as yet, recognize the true nature of the disease. The discovery that the transparent or waxy change begins in the minute arteries and capillaries was made by Dr. Kirk, and announced to the Pathological Society in June of 1853. In the same year Meekel published the results of his investigations. He considered the new substance to be cholesterine, and first described the peculiar reaction with iodine and sulphuric acid, which marks an era in the history of the disease. Virchow, in the same year, having discovered the cellulose reaction of the corpora amylacea of the brain, sought for and found the same reaction in organs representing the waxy degeneration, thus verifying from the chemical behavior of the deposit, the results reached by the Edinburg observers based on its translucency. He named it Animal Amyloid, to distinguish it from its supposed analogue in the vege-

table kingdom, which name has been generally adopted, although the "starch-like" nature of the material has been discarded.\*

The analyses of Frederich and Kekuhle show a remarkable similarity in chemical composition to the protein group. Thus, the analysis of a waxy spleen gave C.53.58, H.7.00, N.15.04. The composition of albumen, according to Lieberkuhn, is C.53.58, H.7.00, N.15.06. That it is fibrine and not albumen, says Dickinson, is shown by "a strong tendency to undergo contraction after its deposition; that it becomes converted into fibroid tissue, a metamorphosis which is common with fibrine; and that in certain cases it is identical itself. He claims that the process by which Dickinson obtained the so-called "dealkalized fibrine," is absolutely identical with that for the artificial production of syntonin, the chief constituent of muscle, which gives a staining with iodine contrasting as much with the amyloid reaction as the latter does with healthy tissue.†

The essence of Dickinson's theory is that the amyloid material is a deposit from the blood. Stewart and others, however, maintain the view, that it is a true degeneration—a metamorphosis of tissue, and pertinently asks, "How can it happen that the small arteries, nay, the small arteries of certain organs, nay, the middle coats of the small arteries, should be the chosen seat of deposit of a material poured from the blood." Difficult as it is to answer satisfactorily all of the objections, there are many reasons for considering it a deposit from the blood, viz: all organs affected with amyloid disease increase in size and weight. Murchison gives as one of the diagnostic points of a wax of liver, the increase in size, often to the extent of filling up a large portion of the abdominal cavity. Waxy kidney in appearance and reaction, as well as continuous in position, with the hyaline casts which are found in the tubes, the fibrinous nature of which is not possible to doubt."\*

The same author found by analysis of organs which had not undergone the waxy change, a decided increase in the proportion of the alkaline salts. He was further enabled to remove the alkali from fibrin by digesting it in weak hydrochloric acid—a translucent, gelatinous material resulted, which gave the characteristic amyloid reaction with iodine. On subjecting the amyloid tissue

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\* *Edinburg Medical Journal*, March, 1868.

† *Medical Times and Gazette*, July, 1868. *Ibid*, February, 1869.



to the action of a free alkali he found the reaction with iodine was no longer produced. Hence, he draws an ingenious and plausible inference that the deposition of the amyloid material is dependent upon those conditions which produce an excess of fibrine and decrease of albumen in the blood.

Dr. Legg, however, calls in question the accuracy of the statements made. In his experiments the digestion of the diseased tissue in free alkali did not interfere with the iodine reaction, any farther than that it required a little longer time after the application for the peculiar color to show, often weigh 10 to 15 ounces each. This increase in bulk must depend upon the addition of new material to the normal structure. Stewart attributes it to the secondary deposit of fibrinous material in the tubes. It is hardly probable that distension of the tubules could cause such a large increase in size, even should it cause the increase in weight. Again, according to his own statement it affects the cells of the liver, and in both spleen and liver individual cells can be seen distended by the material in question. The hypertrophied parts in each of the latter organs can be proven to be waxy material both by its transparency and its affinity for iodine. "In the spleen the waxy deposit occurs sometimes as a diffuse infiltration of the whole organ, which, in consequence, becomes enlarged and indurated, sometimes in the more conspicuous form of small, circumscribed deposits which appear as round transparent nodules scattered in the opaque red pulp of the gland."\* There are also on record two cases, one by Murchison and another by Dickinson, in which the waxy material occurred as a tumor attached to the cerebral membrane.†

All authors recognize prolonged suppuration to be a most fruitful cause of the disease. Probably, in a vast majority of cases, post-mortem examination will reveal the present or former existence of suppuration. Kidney disease itself, through the drainage of albumen, which it sets up; or any chronic disease by the impairment to nutrition which it produces, may act as an active, or, at least, a predisposing cause.

TREATMENT.—The disease is very feebly combated with medicines; still, their judicious use may often hold it in abeyance. The primary indication is to remove, as far as possible, the cause.

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\* *Edinburgh Medical Journal*, March, 1868.

† Dickinson, *loc. cit.*, p. 168.

If a diseased bone or suppurating wound be the parent, let surgery remove it. If phthisis or syphilis, remedies addressed to them will indirectly benefit the local lesion. Briefly, whatever tends to build and tone up the system to ideal health, is indicated. First, then, a good nutritious diet, and as the waste is principally in the non-nitrogenous elements, articles rich in these materials are especially valuable. Even alkalies may be administered with profit. The tinct. of the perchlor. and the syrup of the iodide of iron are the best tonics. The iodide of potassium, either with or without a history of syphilis, has proven of benefit. The use of cod-liver oil, which is especially indicated in the lung troubles, that so often herald the amyloid disease, is of doubtful utility. Frerich, even goes so far as to mention cases in which the oil was the probable cause of the disease.

Diarrhea forms one of the most troublesome symptoms to meet. Opium can be used with greater freedom in this, than in other forms of renal disease, owing to the infrequency of uræmic phenomena. Where the ordinary remedies fail, Dickinson recommends the sulphate of copper. Climate is probably destined to play as important a role in the treatment of the chronic forms of Bright's diseases, as it now does in the treatment of pulmonary consumption. Statistics, already collected, for which we are mostly indebted to Dickinson, show that the mortality from renal diseases in temperate climates, is very much in excess of that in other climates. Contrary to what we would expect in the frigid zone and the tropics, this class of diseases is almost unknown—the greater frequency being found where the mean temperature is about 50° F. A large majority of cases occurring in temperate climates would undoubtedly be benefited or the system rendered more tolerant of the local trouble by a continued residence in a colder climate.

To recapitulate. We recognise three distinct forms of *Morbus Brightii*: one primarily manifesting itself in the epithelium of the tubes; the second in the fibrous matrix, and the third in the arterioles. These three forms may be variously combined in the same organ. In fact, it is rare to find the two latter running their course without lighting up the tubular disease. Fatty kidney we reduce from a distinct form to a symptom; the result of a depraved cell-growth, generally caused by idiopathic nephritis or following its supervention upon one of the other forms. The "large white kidney" is caused by the fatty change in the first form. The

"small white kidney" is the result of the fatty degeneration in the latter stages of granular, sometimes of the amyloid disease. The tubular disease runs an acute course; the granular and amyloid forms have a chronic history.

In making up a differential diagnosis between the chronic forms, there are, outside of the special symptoms, several considerations which may materially aid us. Thus, albuminous urine occurring in a person past the meridian of life, of irregular habits or subject to gout—the left ventricle of the heart hypertrophied, and the ophthalmoscope showing the retina infiltrated with serum, the probability almost amounts to certainty that the special form of kidney disease, is the *granular*.

Albuminous urine, on the other hand, occurring in a patient of sallow, cachectic appearance, having an antecedent or present history of chronic disease, or any exhaustive drain from the blood, with an enlarged spleen or liver, and suffering from chronic diarrhea, you can pronounce with equal certainty the special kidney lesion to be the *amyloid*.

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**Dr. Dieulafoy's "Aspirateur Souscutane."** Under this name an instrument has been suggested by means of which effusions into synovial or serous membranes, collections of pus or blood, and even hydatid sacs, may be safely evacuated. It consists of an instrument resembling a subcutaneous injection syringe, with a terminal and a lateral tube fitted with stopcocks, to which a *capillary* trocar can be fitted, so that after withdrawal of the morbid liquid an injection may be practised without removing either the trocar or the pump.—*Med. Times and Gazette*, November 20, 1869.



## Medical Societies.

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### AMERICAN MEDICAL ASSOCIATION.

FIRST DAY—TUESDAY, MAY 3, 1870.

The 21st annual meeting of the American Medical Association convened in Lincoln Hall, in the city of Washington, on Tuesday, May 3d.

The Convention was called to order at 11 A. M., by the President, Prof. GEORGE MENDENHALL, M. D., of Ohio; Dr. WILLIAM B. ATKINSON, of Philadelphia, Permanent Secretary.

The Rev. Dr. Boynton then opened the Convention with a fervent prayer.

The President then announced that the report of the Committee of Arrangements would be read.

Dr. Antisell, chairman of that committee, then made an address of welcome, expressing himself as gratified in seeing so full a representation from the Southern States, which had for so long a time been so sparsely represented. He hoped, from the various interests connected with this convention, much good would be accomplished.

Reports of standing and special committees were made and adopted or referred to the proper Sections.

The committee then presented the following programme:

#### PROGRAMME FOR EVENINGS OF MAY 3, 4, AND 5.

Tuesday—Reception by the President of the United States at 8 P. M.

Wednesday—Reception by the Surgeon-General at the Army Medical Museum, from 7 to 10 P. M.; surgical lecture in the lower hall at 8 P. M.; microscopical lecture in the lower hall at 8:45 P. M.

Thursday—Exhibition of the illumination of the Capitol dome at 8 P. M.; reception by the Mayor of Washington, Hon. S. J. Bowen, at 9 P. M.

The Secretary then read the roll of membership.

The Committee on Credentials submitted a majority report, which excluded delegates from the National Medical Society of

the District of Columbia, American Academy of Medicine of the District of Columbia, Howard University Medical College, Alumni Association of the medical department of Georgetown College, also the three city hospitals, on ethical grounds.;

Dr. Robert Reyburn, chairman of the Committee on Credentials, submitted a minority report. He began by remarking that the committee had disgraced itself and lowered itself to the level of a political caucus.

Dr. Davis, of Chicago, called the gentleman to order.

On motion the report was accepted and referred to the Committee on Ethics, with instructions to report at their earliest convenience.

Dr. Tucker, of California, then moved that so much of the majority report as affected the minority report be referred to the Committee on Ethics.

Dr. Stewart, of the District of Columbia, presented a protest to the majority report of the Committee on Credentials; which was also referred to the Committee on Ethics.

Dr. Busey, of the District of Columbia, presented a protest signed by many physicians against the admission of Dr. C. C. Cox, now residing in the District, as a representative from Maryland; which was referred to the Committee on Ethics.

Dr. Davis then moved that the meeting proceed with the regular order of business. Carried.

A number of members were then accepted by invitation.

The reading of letters and telegrams from absent members was next in order.

Dr. L. A. Sayre, chairman of the Committee on Ethics, and one of the vice presidents of the association, said a pamphlet had been published and circulated by one Dr. Ruppenner, and asked that the subject be referred to a special committee.

Dr. Davis moved that the Chair appoint a new Committee on Ethics for the ensuing year, to which this subject be referred. Carried.

The following gentlemen were appointed: Alfred Stille, New York; N. S. Davis, Illinois; J. N. Kellar, Kentucky; H. F. Askew, Delaware; J. J. Woodward, U. S. Army.

The convention then took a recess of five minutes.

After the reassembling of the convention, the President read his Annual Address, of which we can present but an outline. A large portion of the address was devoted to a brief review of the

formation, early history and influence of the Association. Dr. Mendenhall says, "That it has had a beneficial influence, on the profession in this country, in crystalizing around it the scattered elements of usefulness it is presumed few will deny. Yet it has been the habit in some quarters to speak disparagingly of our efforts to advance the profession because more has not been accomplished. A spirit of fault-finding has usurped the place of well-directed efforts to remedy our deficiencies. Attempts have occasionally been made by these detractors to make a cheap reputation for critical acumen and knowledge without the investment of either labor or learning, and the question has been defiantly asked, 'What has the American Medical Association done to entitle it to the respect of the profession?' This is, indeed, a proper question, when asked in a spirit of candor, and from a desire to ascertain in what respect we have failed in performing our duty, so that a becoming zeal in the profession may be stimulated to fulfill the objects and aims set forth in the preamble and resolution passed at the Medical Convention held in Philadelphia, in May, 1847. The whole profession in the United States is, by that resolution, invited to co-operate in promoting the laudable ends proposed. With an invitation so comprehensive all may participate in the work, and urge forward such needed reforms as the interest of the profession requires. Objectors and critics, therefore, are entitled to respectful consideration only after they have accepted this invitation, and exhausted their efforts unavailingly in endeavoring to make this Association what was proposed. They are not of the class of men who have made earnest efforts in this direction. To estimate properly the extent of beneficial influence attained, it will be necessary to consider the condition of the profession previous to the organization of this body. It had no organized common bond of brotherhood; medical societies were comparatively rare in the United States, and their influence was not felt in the profession beyond their immediate members. There was no code of medical ethics generally acknowledged. Each society was a law only unto its own members. There was little stimulus to medical improvement and emulation; but few books were in demand, and these were mostly of foreign authorship. American medical literature held a very inferior position. The defects in medical education were much greater than at present, and with little, if any discussion, tending to its improvement. In a large portion of our country a medical



education was considered complete upon complying with an uncertain amount of office reading and attending a single course of lectures for four months, with six instructors at the most, and often a less number constituting the entire faculty. The usefulness, honor, and interests of the medical profession received little support from organized effort or concert of action, while the facilities for fostering friendly intercourse were almost entirely neglected.

"At the present time, on the contrary, we have in this association an organized bond of union between its members extending into every State from Maine to Texas, from the Atlantic to the Pacific, who come up to our yearly meetings with hearty greetings of fraternal interest for each other.

"They become touched with a coal of living fire from the altar of medicine, and inspired with high and holy resolves to cultivate their profession with greater assiduity. Their early vows of fidelity to the profession are renewed, so that on their return to the brethren at home they form new foci from which radiate new influences of professional zeal and fraternal regard, inevitably producing a corresponding increased strength of the bonds of brotherhood which ought to exist among us. Old societies are excited to works of greater efficiency, and new ones are originated; so that from being comparatively rare and sluggish, they have multiplied and become active organizations, whose power and usefulness are felt and recognized.

"We now have a code of medical ethics, which is a written law, clearly defined, of acknowledged force and effects that prevails from one end of the Union to the other. The result is a great improvement in professional morals. It crests an impassable barrier between the clean and unclean; between the physician and the charlatan. The honor, usefulness, and interests of the profession have thus been promoted, and a greater interest and a higher regard have grown up, and we hail each as brethren, having a common object, with similar responsibilities, attachments and destiny. The establishment of the code is in itself worth all the cost, time, and labor given to the interests of the Association. In this connection, I think all medical schools in the land represented in this body ought to be requested, yea, required, to teach its precepts to their students, so that while they are imbibing medical knowledge they shall also have the standard morals of the profession they propose to enter instilled into them. It is reasonable that we should require each graduate before receiving his diploma to

sign a pledge or agreement to support the code as a condition of graduation; and that the colleges should reserve the power to revoke the degree in case the pledge be violated. A full assent to its provisions should be adopted as our Hippocratic oath, and a copy of the code given to the new graduate as a parting expression of interest from the faculty. The effect would be beneficial, and might save some of our young men from wandering outside the true fold of rectitude, and the colleges from the disgrace of recreant graduates. The stimulus to improvement and emulation has been much intensified; medical literature is in greater demand, and the production has kept pace with the requirements.

"While the demand for and the production of foreign books have not diminished, an impetus has been given to American medical publications that promises a speedy return of all obligations to our transatlantic brethren. American authors have greatly multiplied and taken position not inferior to any in the world. In this connection it is a proper matter of inquiry as to how far the profession directly and indirectly is indebted to this Association for valuable additions to our original literature. It is quite evident that a review of this subject will astonish even those who have regularly attended our meetings. We have a large number of monographs, prize essays, and reports in our transactions which would bear republication in separate volumes, and be read with profit by the profession. Several of these contain results of original investigations upon subjects respecting which we may search for elsewhere in vain. I suggest that it would be judicious to endeavor to make arrangements with some enterprising publishing house for selection and republication, which might be profitable alike to the Association, publishers, and medical readers. It would diffuse a large amount of medical knowledge that is now overlooked, and lies buried among the archives of our Transactions.

"The prize essays, at least, are worthy of being placed before the profession in separate volumes; while a selection of other monographs might be made of equal value.

"An enumeration of the contents of the first ten volumes was made by one of the most distinguished of my predecessors, Dr. Paul F. Eve; and I now propose to continue the same subject in reference to the succeeding and last ten volumes, by which it will be seen that our members have not been idle.

"Prizes have been awarded for the following essays:

"The Clinical study of the Heart Sounds in Health and Disease.

"Vision, and some of its Anomalies, as Revealed by the Ophthalmoscope.

"An Inquiry into the Physiological and Medicinal Properties of *Veratrum Viride*, together with some Physiological and Chemical Observations upon the Alkaloid *Veratria*.

"The Pathology of Jaundice.

"The Surgical Treatment of Morbid Growths in the Larynx.

"Prizes have been awarded for eleven essays, making 552 pages.

"Reports on Medical Literature consist of 210 pages; on Medical Education, 146 pages; on Medical Topography and Epidemic Diseases of fifteen States, 824 pages.

"In the Department of Practice of Medicine, 410 pages; on Surgery, 519 pages; on Obstetrics and Diseases of Women, 238 pages; on Physiology and Pathology, 138 pages; on Ophthalmology, 132 pages; on Medical Jurisprudence, 80 pages; on miscellaneous subjects, 1,159 pages—the aggregate of which is 4,460 pages."

The Doctor goes on to give a general summary of the contents of the last ten volumes of the Transactions of the Association, and says:

"Although this summary is not a complete index, it will serve the purpose of showing what the Association has accomplished in the way of contributions to American medical literature. What association has done more? Where will we find one that has achieved as much?

"If to unite the brethren; if to establish a sound code of medical ethics; if to elevate the standard of the profession; if to stimulate the cultivation of our literature, and if to place this Association at a point where its moral power is felt to be the highest in the land in its influence on all medical organizations, be of importance, then it has accomplished a success. We claim all these results, and even more, for the American Medical Association. But let us not rest satisfied with what has been performed; much remains yet to be done."

The President urges the importance of appointing strong committees, so as to insure reports, and such, too, as shall be of value.

The subject of medical education is touched upon, and the difficulties that in this country surround it are mentioned. He says: 'Rhetorical exaggerations of the low condition of the profession, and of the culpability of medical colleges, are easy to be made; but what we greatly need is to have substantial aid and encourage-



ment to those willing to risk advance movements for the promotion of improved medical instruction and in the requirements for graduation. Severe denunciations will not attain the desired object; let an unmistakable indication in the profession be shown that medical students shall be sent to those colleges which are willing and endeavoring to furnish improved plans of medical education. It is clear to my mind that the mass of the profession is involved in the responsibility of our defective system equally with, if not to a greater extent than, the teachers. Both must put their shoulders to the wheel for the purpose of extricating the educational car from the mire. The difficulties are immense, and the labor must be divided. It is evidently the place of the private teacher at the inception of a student's career to guard the portals, and admit only those who are properly qualified to enter upon the study of medicine before they have occupied time and made pecuniary investments for this purpose. Here is where censorship should begin, and when it is comparatively easy to turn aside the applicant for professional honors. The general condition and standard of knowledge in the community will determine in some degree the character of those seeking to enter the profession, while the state of intelligence of the profession itself will determine the quality of those who commence the study. Here, then, we find the circumstances which control the kind of material sent to medical colleges. The faculties ought by right to be exempt in a great degree from the responsibility of judging who shall enter upon a course of college instruction.

"The construction of our government and of society is in part responsible for our difficulties. The general and state governments exercise no supervision over those who practice the profession; and the people exercise very little intelligent discrimination as to the character of those they employ. While this is the case many who are called to administer to the necessities of the sick will be selected from those of inferior capacity and education. Herein lies, to a great extent, the deficiency of adequate stimulus by which young men are induced to spend a proper amount of time and industry in obtaining the necessary preliminary and medical education. In some measure this is attributable to the newness of our country, and the condition of the pecuniary resources of the people. As the country advances in maturity and in ability to compensate adequately the cultivated physician, a better class will be forthcoming, because demanded. As circum-

stances are, however, at present, when the student presents himself for matriculation at a medical college, his condition as to preliminary education should be inquired into, and the faithfulness and success of his private instructor ascertained. Should the proposed matriculant be deficient in preparatory training, or of feeble intellect, his career in the direction of the profession should be checked. Once admitted into a medical college, the faculty should be held responsible for his advancement. His progress should be ascertained by frequent examinations; and, if indolent or incapable, he should not be permitted to proceed beyond the elementary studies. The extent of the responsibilities imposed upon the faculties, and the manner of education, are proper subjects for inquiry and determination by this body. In arriving at proper conclusions reference must be had as to how far an increase in the requirements is practicable. If we undertake too much, or transcend what the condition of our country will sustain, it will be a failure. But let us do something—make and enforce some notable advance as an earnest that we can and will inaugurate a system of improvement that will redound to greater professional advancement and honor. That a very considerable progress, both in regard to preliminary education and the completeness of the medical course of instruction, can be made, will hardly admit of a doubt. In reference to the requirements of the examination for the doctorate, difficulties in regard to the standard to be adopted will be presented; and it may be a matter of doubt whether the full measure of reform, or anything of great value, will be accomplished in this direction until the privilege of teaching and of conferring degrees be separated and placed in different boards, or at least that a mixed commission shall determine who is worthy of the degree of M. D. Whatever is done, let it be with proper deliberation and wisdom, so that the advance may be maintained firmly, and no retrograde movement ever become a necessity. The moral power of the Association must then be brought to bear on this question, and the colleges that do not adopt a plan recommended by it should be debarred from representation, and their graduates be not eligible to membership. Nothing short of such regulations will meet the requirements of the case.

“It is not for me to suggest what plan ought to be adopted by the Association, or what reforms in medical teaching may be enforced. The subject has again been referred to the colleges, and it

is to be hoped that a wise and judicious system will be adopted with unanimity, and recommended to this meeting, which will secure the end in view. It would seem as if the time had arrived when a conclusion as to what is necessary and practical with recommendation for progressive improvement should be determined upon. The extent of the preliminary education, character of the material admitted to collegiate instruction, and a system which will furnish a sound medical education to the rising professional generation must be determined by the profession, and not by legislation. The responsibility of settling these questions belongs to this Association.

"In the exercise of what I conceive to be a proper spirit for several years past, it has been customary for this body to appoint delegates to various foreign medical societies. In the majority of instances there has been no reciprocation by them in the appointment of delegates to this Association. I would therefore suggest that we appoint no delegates hereafter to societies that have failed to respond to the courtesy that has been extended by us to them."

On the subject of patents Dr. Mendenhall uses this unequivocal language: "The true and only safe ground is, that every man enlisted in scientific medicine should feel himself bound to contribute to the general stock of knowledge as much as may lie in his power. All should impart freely and receive freely in the spirit of true science, knowing no narrow or contracted boundaries, whether a physiologist, pathologist, therapist, or surgeon. Let there be no retrograde movement in this direction. A false step once taken will involve us in a labyrinth of inconsistencies, and bring dishonor to our beloved profession. If we admit the principle of patent rights pertaining to medical matters to be consistent with sound medical morals, let us never again claim to be actuated by a catholic spirit of liberality in the medical profession. All lines of demarcation between the charlatan and the true physician would soon be obliterated."

We are glad that Dr. Mendenhall has devoted a few words of his address to the abuse of stimulants and opium. He says:

"As conservators of public health and guardians of the mental and physical hygiene of the people, it may well be a subject for our deep and earnest attention—whether we can do more than we have done and are doing to prevent the gigantic evils attendant upon the use of alcoholic stimulants and of opium; whether we can in our therapeutic administrations of stimulants and preparations



of opium, particularly in chronic diseases, find substitutes or make combinations that may diminish the liability to form tastes or habits incompatible with the highest welfare of our patients. The growing popularity in the use of narcotics by hypodermic medication in chronic and slight cases may well be brought under the same inquiry. Far be it from me to impugn the motives or to criticize the judgment of my professional brethren. I can not, however, but feel that it is quite possible for us to jeopardize the best ultimate interests of the sick by the frequent prescription of stimulants, which is peculiarly one of the notable features in practice at the present time. If we are doing this when avoidable, we are taking a fearful responsibility with those placed under our care; the evils of which may be developed and last long after we are mingled with the dust of the earth. I suggest that we consider this subject carefully, and then act in the light of experience and of conscience. It may be a serious question, also, whether we have yet filled the measure of our duty in giving our influence toward rectifying and ameliorating the results of the habitual use of alcoholic poisons. The institution of Inebriate Asylums should be more prominently urged upon the profession and the people, directly and through recommendations of state medical societies, from which the more direct influences upon legislative bodies ought to proceed. I would ask, where is there a wider field for sanitary reform than is here presented, and where our efforts are so imperiously demanded? A pestilence, destructive of both body and soul, where the destroyer is slaying its thousands and tens of thousands annually of the best in the land, surely requires our most earnest efforts to abate it."

He closes his address with an eloquent tribute to the memory of those who have died during the past year. He says:

"Within the last few months death has rendered vacant many places of distinguished members of our profession. It is seldom that in one short year we have to record the death of so many of the fathers of American medicine—men who commenced in early manhood, have grown old in the service, and who have left their impress upon it for all time: Robley Dunglison, Charles D. Meigs, Alex. H. Stevens, Alden March, Benjamin W. Dudley, and Samuel Jackson, formerly of Northumberland, two of them having been honored presidents of this Association, have passed from time to eternity, leaving us glorious examples of the highest type of pro-

professional renown, distinguished alike for their illustrious attainments and unblemished character as Christian gentlemen.

"This experience must remind us that we, too, who form the connecting link between the founders of this Association and the younger members of the profession, are rapidly hastening on to the common lot of man. The lengthening shadows of the afternoon of life are fast gathering around us, as reminding us of the noiseless yet unfaltering step of time. In view of this, we should look kindly on those who are closely pressing us in the onward race of life. Let us, then, give encouragement and support to the younger members of the profession, and hold up the hands and hearts of the middle-aged, who must soon take our places in the efforts to sustain and promote the honor, dignity, and usefulness of the profession. We can thus yield our places to the rising professional generation gracefully, not grudgingly, knowing that it is, in the course of nature, wisely ordered by the Author of our existence."

It was moved that the thanks of the Association were due to the president for his able address, and that a copy be requested for publication. Carried.

The next business was the report of special committees and presentation of papers.

The committees for the year 1869 made their reports, some of which were continued and others discharged.

Dr. T. Antisell, District of Columbia, then read a report on veterinary colleges; which was referred to the Committee on Publication.

The Association at 2 P. M. took a short recess for the purpose of choosing a Committee on Nominations.

After reassembling, the chair announced the following gentlemen as Committee on Nominations: Alfred Stille, Pa.; G. C. B. Nottingham, Mass.; H. F. Askew, Del.; H. Carpenter, Oregon; S. C. Busey, D. C.; J. A. Murphy, Ohio; C. M. Carleton, Conn.; E. W. Jenks, Mich.; J. Rea, Ind.; R. Z. Michel, Ala.; E. P. Lankford, Mo.; A. N. Talley, S. C.; J. E. Manlove, Tenn.; J. L. Atlee, Penn.; S. M. Bemiss, La.; J. N. Kelley, Ky.; J. J. Cockrell, Md.; C. A. Lee, N.Y.; G. S. Palmer, Maine; F. J. Haywood, Jr., N.C.; G. C. McGregor, Texas; H. Nance, Ill.; R. W. Haxall, Va.; O. Bullock, R. I.; — Barber, Iowa; A. B. Stuart, Minn.; M. Greeg, U.S.A.; J. J. Steinriede, Miss.; H. W. Brock, W. Va.; S. Lilly, N.J.

Dr. C. C. Cox, of Maryland, moved that the name of Dr. Busey, of the District of Columbia, be stricken from the list of delegates

until such time as the Committee on Ethics should report relative to the District of Columbia.

Dr. Busey said that Dr. Cox was not a delegate from Maryland. A vote being taken on the motion of Dr. Cox, it was lost.

The Secretary then announced that the Nominating Committee would meet in the prayer-room at 4 P. M.

A motion to adjourn was then put, and, a division being called for and count taken, the Convention adjourned to 9 o'clock Wednesday morning.

#### SECOND DAY--WEDNESDAY, MAY 4TH.

The Association was called to order at 9.30 by Professor George Mendenhall, president; Dr. William B. Atkinson, secretary.

On motion, the reading of the minutes was dispensed with.

Dr. Gross, of Philadelphia, said that it was his opinion that they should have a social reunion annually, to be held on the 3d day after the convening of the Association. He, therefore, moved that the social reunion be held at the Arlington House on Thursday evening, at 8.30 P.M. Carried.

A committee of five was appointed to make arrangements for the social.

Dr. T. Antisell, of the District of Columbia then read a list of members by invitation.

Dr. Alfred Stille, of the Committee on Medical Ethics, then read a partial report relative to the Massachusetts Medical Society, by which their delegates were admitted to seats in the Association, and recommending them to eject from their society all who were not what is considered by the Association as regular practitioners.

Dr. Bemiss, on the part of the Nominating Committee, made a report of the number of States represented.

On motion, the paper read by Dr. Antisell, on Tuesday, was reconsidered.

It was moved that the subject be referred to a committee of three. It was so ordered.

The Secretary read a paper charging Dr. C. C. Cox with a violation of the code of ethics; which was referred to the Committee on Ethics.

Dr. Cox endeavored to explain, but was forced to desist on account of the noise.

On motion, five minutes were given to Dr. Cox to make an ex-



planation. He said that he had bought a license from the Medical Association of Washington city, but he had never received the said license, and that was the reason he was not a member of the Medical Society. And, further, that he had never importuned any Senator on any subject whatever, as had been charged upon him.

Dr. W. H. Mussey, of Ohio, then offered a resolution that the Committee on Ethics be instructed to meet and report immediately on the subject of the admission of members now before them. Not approved.

Dr. Loomis moved that all the delegations of this city be admitted to the Convention until the question of credentials is settled.

It was decided that Dr. Loomis and others of this district had no right to vote or speak while the question was pending.

A division was called for, and the resolution of Dr. Loomis was lost by a vote of 107 yeas to 142 nays.

Dr. Cox, of Maryland, moved that no delegates from the District be admitted until the Committee on Ethics report. Carried.

Dr. Yandell, of Kentucky, moved that the Medical Society of the District of Columbia be blotted utterly out from the map of the Medical Association.

Dr. White, of New York, protested against any such motion, and moved that the motion be laid upon the table. Carried.

Dr. F. G. Smith, of Pennsylvania, chairman of the Committee on Printing, made a report giving a detailed account of the work of the committee for the past year. The report was received.

An amendment was made to the report, that all the matter hereafter ordered to be printed be stereotyped.

Dr. Gross, of Pennsylvania, made an amendment to the amendment that the Transactions of the Association be published in a medical journal to be issued monthly.

The Secretary then submitted the annual report of the Treasurer, which was referred to the Committee on Publication.

A communication was then read from the British Medical Association to Dr. Gross, complimenting the American Association upon their success. Referred to the Committee on Publication.

Dr. T. Antisell here arose to a question of privilege. He then read an extract from the *Chronicle* of Wednesday. He denounced the statements referred to as unfounded in fact, and objected to

the circulation of any paper whatsoever, and particularly any of a political import, in the hall.

Mr. Davis, of Illinois, moved that hereafter *all* papers, circulars, pamphlets, etc., be excluded from the hall. Carried.

The regular business was then taken up.

Dr. R. Reyburn, of the District of Columbia, from the Committee on Library, then read the annual report of the Librarian. Received and referred to the Committee on Publication, and the bills ordered to be paid.

Dr. Sayre, Chairman of the Committee on Ethics for 1869, moved that all papers in the hands of the old committee be referred to the new committee, and the old committee be discharged.

Dr. T. Antisell, of the Committee of Arrangements, then made a report of the members who had arrived since the opening of the convention.

The Committee on Medical Literature (Dr. J. J. Woodward, United States Army, chairman) submitted a report, which was referred to the Committee on Publication.

Dr. Burge, of New York, moved that the motion of Dr. Gross, in reference to a supper to be given at the Arlington, be reconsidered. Carried and tabled.

Dr. C. C. Cox, chairman, submitted a report from the Committee on Medical Necrology. Referred to the Committee on Publication.

Dr. Moore, of Missouri, United States Army, presented the following resolution :

*Resolved*, That no medical man shall deliver an efficient course of lectures under a price to be decided by this Association.

Dr. Moore said that the irregular practices of the Western colleges imperatively demanded some such action to save the profession from disgrace, and if they adopted the resolution they would elevate the profession to its proper standard.

Dr. Davis, of Chicago, opposed the resolution. He thought it was impracticable for the Association to fix a standard of charges for the medical colleges of the country. He did not wish the Association to vote against the resolution ; but he wanted appended to it a law stating what should be considered the standard of our work to be done for the money paid.

Dr. Moore, of Missouri, said his object was to fix a minimum price. Those colleges which had the grade might charge as

much as they pleased. The Doctor claimed that this course would promote competition, and would so elevate the standard of colleges and make more uniform what is termed an efficient course of lectures.

Professor McNaughton, of New York, spoke against the resolution.

Dr. Selden moved that \$100 be the sum named to fill the blank left in the resolution offered by Dr. Moore.

The motion was then put in the form of a resolution which excluded any or all delegates from colleges who received a less fee than \$100.

An amendment was made to include the Alumni of such institutions.

Dr. Yandell, of Kentucky, spoke to the resolution at length, opposing any fixed price as detrimental to the progress of the profession. He contended that circumstances altered cases, and prices also. Dr. Yandell then touched upon the standard of education. He was in favor of English, but opposed to Latin and Greek requirements.

The remarks of Dr. Yandell were listened to with the greatest attention.

It was then moved that the resolution be laid on the table which, after some further discussion, was so ordered.

Dr. Sullivan, of Massachusetts, moved that the action of this Association should be made final for five years from this date.

Dr. Johnson, of Missouri, revived the question of stated fees, and spoke at some length in favor of the said fees being regulated by the American Medical Association.

After some further discussion, the motion of Dr. Sullivan was laid on the table.

Dr. Collins, of Massachusetts, presented the following resolution: That the charge for medical examination for life insurances should be not less than \$5. Adopted.

Dr. Sullivan, of Massachusetts, presented a resolution to the effect that the American Medical Association have power to control medical education throughout the United States. Passed.

Dr. D. A. O'Donnelly, of Maryland, offered a resolution that a committee of three be appointed to report on the evil of abortion, and to consider some means whereby to expel from the Association all such as practiced abortion. And further, denouncing in



the most unqualified manner, all who indulge in this abominable practice. Passed.

The Committee on Nominations then reported the following named officers for the ensuing year :

President—ALFRED STILLE, Pennsylvania.

Vice Presidents—J. S. Weatherby, Alabama ; Henry Gibbons, California ; J. T. Hurd, Texas ; Samuel Willey, Minnesota.

Assistant Secretary—Dr. J. C. Tucker, of California.

Treasurer—Dr. Casper Wister, of Pennsylvania.

Librarian—Dr. F. A. Ashford, District of Columbia.

Committee of Arrangements—Chairman, Dr. A. N. Sawyer ; J. C. Tucker, Shurtleff, Holman, Murray, U. S. Army ; Simmons, Cal. ; Carpenter, Oregon ; Morrison, Nevada.

Committee of Publication—Drs. F. G. Smith, W. B. Atkinson, Pennsylvania ; J. C. Tucker, California ; F. A. Ashford, District of Columbia ; Casper Wister, Pennsylvania ; H. F. Askew, Delaware ; William Maybury, Pennsylvania.

Committee on Prize Essays—T. M. Logan, California, chairman ; H. Gibbons, H. H. Toland, Beverly Cole, Cooper Lane, California.

Place of Meeting, San Francisco, California.

Time of Meeting, first Tuesday in May, 1871, at 11 A. M.

The report was received and adopted, and a resolution passed that the next place of meeting be at San Francisco, on the first Tuesday in May, 1871.

(*To be continued.*)

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*The Space* occupied by Dr. Kemper's synopsis and Dr Conklin's article was so much beyond our expectation, that we are obliged to lay over considerable matter designed for this month. This will be a disappointment to correspondents whose favors have been on hand for some time, but we hope to get right soon.

*Inebriate Asylums.*—We have had several inquiries for reports of these institutions. Will somebody tell us how and where to procure them ?

## Editorial.

*The Meetings at Washington.*—Nearly at the same time, about the 1st of May, were held three important meetings in the city of Washington: First. The Decennial Convention, for the revision of the U. S. Pharmacopœa; Dr. Jos. Carson, of Philadelphia, was elected President, and a judicious committee is appointed to make the revision, which, we suppose, will proceed with its work as rapidly as possible. Second. The Convention of Medical Teachers; but, except such work as may, perhaps, serve to keep the organization alive, there was absolutely nothing accomplished, or scarcely proposed. Professor S. D. Gross, of Philadelphia, was elected President. Third. The meeting of the American Medical Association. At this meeting there was considerable business of interest transacted, and the usual average of reports; but the disagreeable and annoying seem to have so overshadowed the useful that, putting it in the mildest possible way, most members seem to unite in the sentiment that the meeting was exceedingly discreditable to the profession. Almost from the beginning several questions of ethics forced the attention of the Association. The Boston delegation had a sore in the shape of certain alleged affiliations with quackery in the State Medical Society. Dr. Sayre, of New York, had trouble with Dr. Rupper, and then was the mixed imbroglio of the Washington doctors. Nearly all the trouble in Washington seems originally to have grown out of the question of color; but it has grown in dimensions, and drawn in so many points of complication, that it is hard to tell what is the real issue, or where the greatest difficulty really is. These ethical questions were promptly and correctly referred to the proper committee, yet every session of the Society was largely occupied in the angry discussion of some phase of the matter.

The great educational problem, which, it was hoped and expected by the profession, could now be settled on some definite basis, was given the entire go by.

The selection of Professor Stille for President will give general satisfaction.

The meeting for 1871 is to be held in San Francisco, the railroad having already agreed to make a special reduced rate.

We give the proceedings of the first two days; they give an idea of the whole. We also include the substance of President Mendenhall's address, which will be read with great interest. Next month we shall give the remainder of the proceedings, together with the work in the sections.

*The Ohio State Medical Society.*—We have received the following letters, which so fully explain themselves as to make it only necessary for us to express the hope that the members in central and southern Ohio will do themselves the pleasure to visit Cleveland this year, and gratify themselves with a few days of recreation. Everything indicates an unusually pleasant meeting.

FAYETTEVILLE, Brown County, Ohio, }  
May 20th, 1870. }

DEAR DOCTOR: Permit me to remind you that the *Twenty-fifth Annual Meeting* of the *Ohio State Medical Society* will convene, agreeably to adjournment, at the city of Cleveland, on Tuesday, the 14th of June, 1870. An unusually large meeting of the profession of Ohio is anticipated this year, and we hope you will find it agreeable to your convenience and inclination to lay aside the drudgery of your daily pursuits and cares, and make one of our gathering. The following Special Committees are expected to report:

Medical Jurisprudence—R. M. Denig.

Military Surgery—N. Gay.

Climatology and Diseases of Southeast Kansas—P. Beeman.

Hæmatics—E. H. Hyatt.

Vaccination—W. B. Davis.

Typhoid Fever—C. Falconer.

Surgical Applications of Carbolic Acid—P. S. Conner.

Progress of Ophthalmology—A. D. Williams.

Bright's Disease—W. J. Conklin.

Pneumonia—O. G. Selden.

Improvements in Surgery—W. H. Mussey.

Puerperal Convulsions—Dr. Pomerine.

Diseases of the Larynx—R. Wirth.



Puerperal Insanity—Richard Gundry.

New Anæsthetics—J. B. Hough.

Obituaries—E. B. Stevens.

The Society propose, also, to celebrate their "*Silver Wedding*," or *Twenty-fifth Anniversary*, this year, and the Executive Committee are authorized to make the necessary arrangements. An Historian and Poet, in the persons of Professors E. B. Stevens and John A. Murphy, have been appointed for the occasion.

The leading railroads of the State will all probably extend to the members and their families their usual courtesy, returning those *free* who have paid full fare one way.

We hope this year to greet all the old members of the Society, together with a large accession of new ones, and it will be a matter of great gratification to see among us professional friends from abroad who may find it convenient to be with us. It will certainly be a pleasant reunion to all.

Very respectfully,

W. C. HALL, M. D., *Sec'y Ohio Medical Society.*

CLEVELAND, Ohio, May 11, 1870.

W. C. Hall, M. D., *Sec. O. S. Med. Soc.*

DEAR SIR: In announcing the meeting of the "Ohio State Medical Society" the 14th of June, please announce *definitely* that the Executive Committee have arranged that the second day's meeting on the 15th shall be held on board the steamer R. N. Rice, during passage to and from the Islands for an excursion. Hence it will be necessary for all who would like to participate in the meeting this day to be in town on the 14th.

Truly yours,

H. J. HERRICK, *Chairman Ex. Com.*

*The Indiana State Society* met in Indianapolis May 17th. We are under obligations to the courtesy of the Secretary for a full report, but regret to crowd it out for this month. We hope to find room for an abstract next issue.

**Arrears and Payments.**—The year is rapidly passing, and quite a list of our subscribers have not yet remitted to us. We hope to hear from them all promptly. Very soon we shall commence sending out bills, but prefer to send receipts. City subscribers will please settle without waiting for a collector.

*W. H. C. Onderdonk & Co.*, of New York, have entered upon the preparation of a large number of elegant articles in the pharmaceutical line. We acknowledge our obligations for a package of specimens.

***The Minutes of American Medical Association.***

—The Secretary, Dr. W. B. Atkinson, 1400 Pine Street, Philadelphia, proposes to issue an official copy of the "Minutes" in pamphlet form, if he receives sufficient orders to pay expenses. The price per copy to be 25c. Address, Dr. ATKINSON, as above.

***For the General Good.***—It is proposed that chemists, surgical-instrument makers, &c., have an opportunity at the meeting of the State Society to exhibit new preparations, instruments, apparatus and appliances of interest to the profession.

***Archives of Ophthalmology and Otology,*** by Professor Knapp, of New York, and Professor Moos, of Heidelberg. We noticed the appearance of the first number of this very complete journal some time ago. Part 2 will soon be issued. It is certainly the most thorough work on this specialty we know of, and deserves the patronage of the profession. Address, WM. Wood & Co., New York. Price \$7 a year.

***Acknowledgment.***—We are under obligation to Dr. John Davis for a copy of the *Annual Report of the Board of Public Charities for the State of Ohio*.

***To a Physician.***—I offer a desirable location, with a good property, consisting of a house of five rooms, a woodshed, stable, and other out-buildings; a lot and a half, set with choice fruits, and a never-failing well of pure water. Possession given at any time. Terms, \$800. For full particulars, address H. VIGOR, M.D., Pharisburg, Union Co., Ohio.

***Another New Medical Journal*** is inaugurated in Indianapolis. We learn the first number is issued, but have not been honored with a copy at this sanctum.

***Two more Repenting Brothers.***—MARRIAGES.—GOBRECHT—BROOKS.—On the evening of the 19th inst., by the Rev. J. H. Elliott, at the residence of Mr. Tilghman Pickering, Dr. W. H. Gobrecht, formerly of Philadelphia, to Miss Harriet V. Brooks, formerly of Baltimore.

SEELY—SIMPSON.—In Boston, April 28th, at the residence of the bride's father, Professor W. W. Seely, of Cincinnati, to Helen Simpson, eldest daughter of M. H. Simpson, Esq.

THE CINCINNATI

# LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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*Dr. Hays*

Vol. XIII.—JULY, 1870—No. 7.

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## Original Communications.

*Art. I.--Report of a Discussion upon Hospitalism and Zymotic Diseases as more especially Illustrated by Puerperal Fever or Metria.*

Abridged from the authorized Report.

By AND. C. KEMPER, A. M., M. D., Cincinnati.

[Continued from the last number.]

Dr. T. E. Beatty, physician of the City of Dublin hospital, etc., said: "I will request Dr. McClintock to add to that part of his most able argument the records of the private practice of myself and late father: 7,680 cases; deaths, 6 from accidents of labor, 17 from puerperal diseases, 7 from non-puerperal diseases; total, 30. In May, 1834, I attended a healthy young lady three miles from Dublin, healthy locality, large house and grounds, off of which she had not been for a month, but took exercise freely. The lady died of metria on the fifth day, the child of erysipelas on the eighth, and the nurse recovered from erysipelas after a severe struggle. This terrible disaster is thus explained: Mr. A. Colles had amputated the breast of a very dear friend of mine. I had



assisted at the operation, as well as at the daily dressing of the wound, which had been seized with erysipelas, spreading over the entire body. From one of these dressings I was summoned to my unfortunate patient in the country. I washed my hands, rode in an open carriage without outside clothing, and carried with me, unwittingly, my patient's death warrant. But suppose I had stepped into a crowded ward of the cleanest and best ventilated hospital in the world. I would have inoculated my patient with erysipelas, exhibiting itself as erysipelatous inflammation of the uterus, perineum, pleura, or pericardium (for I have seen it begin in each), with its characteristic fever, constituting metria.

"In 1855 I attended a primipara who had external erysipelas of the nates, which soon extended, became gangrenous and caused death. When this patient was at her worst, I missed the nurse one morning and found she had gone in the night to attend another lady. I was shocked, but it was too late to interfere. Three days after I was called in consultation, and, to my horror, the first person I met in the house was this nurse. I at once, before seeing the patient, pronounced it a fatal case of metria; the lady died in forty-eight hours, and the nurse had a severe attack of erysipelas.

"That most important paper of Mr. Sidey, of Edinburgh, confirms the identity of erysipelas and metria. I will quote some of his cases:

"Mrs. C., easy labor, third child, shivered on the second day, died of metria on the seventh. Her maid was attacked with erysipelas on the fourth day of her mistress' illness and died. Her husband, on the fourth day after she died, was seized with fever, inflammatory sore throat, dusky redness over the fauces, small pustules on the uvula, great tenderness of the larynx and difficulty of deglutition, eventually recovered.

"Mrs. M., easy labor, seventh child, died on sixth day from metria, and there were five cases of metria among her friends during the following week, one fatal.

"Mrs. J. died on sixth day of metria, the infant seized with erysipelas on the eighth day and soon died.

"Mrs. H., twins, died of metria on sixth day; the children died a few days after with swollen bowels and oppression.

"Mrs. C., metria on second day, recovered; the child, when eight days old, was attacked with fever and died.

"The physician who made the autopsy of two of these cases had,

shortly after, fever, erysipelalous inflammation of fauces and throat, and continued debility.

"He also gives an instance showing how erysipelas will produce metria. An out-patient was attending a relative with erysipelalous inflammation of the knee-joint. On returning to the lying-in hospital she took charge of a new-born child; two days afterward the child had erysipelas and died; on the fourth day the mother was attacked with metria, of which she and others died. The hospital was free from metria previous to the illness of the child.

"Dr. Alison cites a case where a young woman who had erysipelalous inflammation of breasts miscarried at the third month, and died of metria. It has long been agreed that when erysipelas is prevalent metria is abundant. In my own report of the South-eastern Lying-in hospital, I show that in every outburst of metria erysipelas was prevalent in the city. The Nightingale Ward of the King's College hospital, London, in the six years of its existence, had the unequaled mortality of one in twenty-eight, a mortality clearly to be ascribed to the location of lying-in women in a general medical and surgical hospital. The outbreak of pyemia and erysipelas in the surgical wards was the signal for the appearance of metria in the Nightingale. The child of the last patient delivered in that ward was slightly marked behind the ear by the forceps. From this mark erysipelas started, and the child died; the mother also died of metria.

"Dr. Johnston, of Kilkenny, says they have no metria in that section of country, and he gives a satisfactory reason for it when he tells us that erysipelas is also unknown.\* The presence or absence of metria depends upon the presence or absence of erysipelas. The diseases are identical, the effects of the same poison in the two conditions differing according to the class of organs obnoxious to its assault. When the epidemic influence of erysipelas is abroad, a man with any kind of wound or scratch may be seized by the disease, and may be killed by it. A woman in the next house may have undergone the serious operation of parturi-

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\*Dr. Johnston remarks the extraordinary freedom from epidemic erysipelas in the Kilkenny hospitals, admits the occurrence of solitary cases of severe phlegmonous and gangrenous erysipelas in the surgical wards, but has seen no tendency to an outbreak of erysipelas in twenty-eight years, and says: "This I believe to be owing, in great measure, to cleanliness, ventilation and hygienic precautions." He gives a case of a non-pregnant matron who died of metria after attendance upon a parturient friend who died of it.

tion, in which a certain amount of violence, and often cracks and tears of the internal and external genital organs are inflicted ; the same epidemic influence that killed the man is also around and about the woman, and can not be shut out. What it is, we do not know. The nature and essence of it we know nothing about, but we do know that the woman may be, and often is, killed by a disease which would not have assailed her if that epidemic influence were absent. Twenty men and twenty women in the same locality may be similarly affected by erysipelas without the slightest intercourse between the houses by friends or medical attendants ; and thus the true *epidemic* nature of the disease is exhibited. But if incautious communication takes place between man, woman, or child affected with external erysipelas and a healthy parturient woman, then the *contagious* nature of the disease is shown. The injured organs of the woman are the weak points seized upon, and from the well-known serious consequence of any kind of inflammation affecting these organs, this asthenic inflammation too often ends fatally. Two zymotic diseases are seldom prevalent at the same time ; most certainly no two of them are ever convertible the one into the other. But while we all acknowledge the truth of this axiom, in general, we are every day denying it in the case of what is called puerperal fever. That is and has been considered a distinct specific zymotic disease, and so has erysipelas ; and yet we have incontrovertible evidence that they always co-exist as epidemics, and that they are convertible in a remarkable degree ; nay, more, we know that, as in the case of Kilkenny, where the one is unknown the other never appears. It is of the highest importance that a clear line of distinction should be drawn between what is called puerperal fever and common acute inflammation of the peritoneum and uterus. It is evident that the latter disease has been frequently taken for the former, and it is clear that from this circumstance arises, in a great measure, the different views entertained on the nature of puerperal fever, the difference in the treatment, and the great difference in success in one practitioner over his fellow, both of whom have been treating different diseases. I am forced, therefore, to the conclusion that metria is not a distinct zymotic disease, but is only a form of erysipelas exhibited in parturient women. Erysipelas is both epidemic and highly contagious. It is idle waste of time to be searching after the nature of, the origin of, and the best means of preventing metria, as if it were a separate disease.



Let us give our attention to erysipelas, and the laws by which its dissemination is regulated; we may thus make some advance in useful knowledge. But all these speculations about isomerism are wholly unintelligible. There is not one gentleman in the house who is one bit the wiser for all that Dr. Kennedy said upon that subject. If the propositions of this remarkable and revolutionary paper are true, then metria ought always to be present in lying-in hospitals; it ought always to be most intense when the greatest number of patients are collected together in them, and there ought to be no intervals of years in some of which the largest number of women have been confined, during which no metria has appeared in the hospitals. But these things are notoriously not true. There is no reason why the laws of nature should be different in this from every other instance in which known causes are followed by known effects. When the cause continues the effect will continue without capricious interruption. We are not obliged to resort to this paper's unphilosophical explanation of the appearance and disappearance of metria in hospitals. We know that when erysipelas is epidemic metria is sure to appear, and when erysipelas subsides so will metria, if separation for a time be enforced, and the disease is not perpetuated by contagion.

“For these reasons I must withhold my assent to the doctrine of the spontaneous generation of puerperal fever. It may seize a woman in hospital, as it may the highest lady in the land, when the epidemic is abroad; or it may be introduced by contagion into an hospital, as well as into the chamber of a duchess, and when once there, all within its range are in danger. Metria or erysipelas finds its way into the chamber of the lying-in woman either by epidemic influence or by contagion. We can not escape the epidemic influence. The surgeon may postpone operations, but the obstetrician can not put off parturition; but the door can be shut in the face of contagion. Medical students generally attend lying-in women in hospitals. In the morning they go to their medical and surgical hospitals and are steeped for hours in their malaria; perhaps some of them are dressers, and come in contact with wounds, ulcers and erysipalattous inflammation, and necessarily carry away with them a certain amount of infection. They pass from their hospitals to the dead house, and in their necroscopic investigations have their hands soaked in the fluids of diseased and putrifying bodies. They then pass to the dissecting room and spend hours in the contaminated air, and in direct con-

tact with flesh in every stage of decomposition. During the evening and night they go, not singly, but in droves, to the lying-in hospital, and each of them examine any woman that may be in labor. If there is erysipelas in the medical and surgical hospitals, and if epidemic influence is abroad—if both these doors are open—what, under such circumstances, can keep erysipelas out of the lying-in hospital. The isolation of the patient in huts can not protect her.

“There are two causes why metria is more prevalent now than it was forty years ago. The first is the change in the type of disease in this country in these last days. All diseases have assumed the typhoid, or asthenic form, which was rare in the early part of this century. The true inflammatory fever actually courting depletion is now unknown. The same diseases are now typhoid, in which depletion is inadmissible and stimulants are demanded. Hence it is that inflammations in lying-in women now generally assume the erysipelatos, instead of the phlegmonous form, and are more generally fatal. The second cause is, that formerly practical midwifery was not a compulsory part of the medical curriculum. When I was a Fellow of the College of Surgeons, and an M. D., I had never seen a lying-in woman. The practice then was never to attend the lying-in hospital until all other school and hospital attendance was finished. Now it is directly the reverse. There are no students in the New Ross, Limerick and Waterford cottage hospitals, and there can be no parallel drawn between them and our large city hospitals. And, moreover, there was little, if any, pathological study, and no pathological societies, in those former times. I said, thirty years ago, that this contagion can be met at the threshold and forbidden to enter the hospital. And now, like Dr. K.’s thirty years of incubation, I produce my egg fully hatched. Midwifery can only be learned by practical experience. I would allow no pupil to attend a lying-in hospital who was at the same time in attendance upon any other hospital or dissecting room. I would have no person in such an institution, midwife, pupil, assistant or master, handle the dead or take part in *post mortem* examinations. There should be individuals for this special service, and a separate officer upon whom the duty of necroscopist should devolve. This would cut off contagion, and we should guard as best we could, by ventilation, scrupulous cleanliness and the most generous diet, against epidemic influence, or the unfortunate reception of a patient in whom the disease had already com-

menced. There is no necessity for revolutionary measures ; there is no need to destroy a time-honored institution long the boast and pride of every Irishman.

Dr. *William Stokes* said : " I do not believe that a poison which so far as we know is the same, will necessarily produce the same disease. In the production of a disease from the introduction of a poison there are two elements, one the poison, and the other the state of receptivity of the constitution into which that poison is introduced. And, therefore, it is perfectly possible that a poison of one disease may produce the appearance of another. We often see mule diseases, diseases between scarlatina and measles, typhoid and typhus, measles and small pox, for instance. I am not a member of this society, and feel that I am intruding. I know nothing of obstetrical science. I never attended a woman in her delivery. The real nature of metria is the important question before us. The question that has been debated, except in one or two instances, has been whether the development and fatality of metria are in proportion to the number of parturient women congregated together. That is the issue we have to try. If it be true, we must believe Dr. Kennedy, whose opinions have great weight, that the parturient woman has in herself a power of generating a poison which affects herself, and may be communicated by contagion to her neighbors, producing a zymotic disease, a term that I greatly object to, which then acquires a great impulse from overcrowding. It is still an open question whether the parturient woman, as such, is ever a generator of a specific poison. That a natural process should, of necessity, be coupled with a tendency to develop a specific and fatal poison, is a startling proposition. It makes nature not only a step-mother, but a cruel step-mother. I can not deny it, but I must bring in the Scotch verdict, ' not proven.' Or is it that the parturient woman is more liable to epidemic influences whether she be in hospital or not. It is a rule in philosophy to accept that explanation of a phenomenon which is most probable. Dr. Denham makes a remarkable statement with respect to the occurrence of metria in undelivered women. Will anybody believe that simple pregnancy is the cause or source of the development of a malignant poison ? The analogy between a parturient woman and that of a person after a surgical operation is by no means perfect. It may be good in a mechanical, but it fails in a physiological point of view. If the supposed poison be generated in the uterine passages, how comes it that every form of abnormal



discharge may occur in the newly delivered woman without being followed by metria? Too much stress has been laid upon the communication of puerperal disease by men employed in dissection, or in attendance upon surgical cases. I don't deny it; but why do not these men produce erysipelas in surgical hospitals? If metria is produced by the hands of the attendants, then it is not produced by a poison generated in the woman herself. The close relation between metria and erysipelas is now fully recognized. Trousseau insists upon it, and says that the new-born infant who dies of erysipelas, dies of puerperal fever. Contagion is less a cause of the spreading of metria in hospitals than epidemic influences. Women are simultaneously affected in hospitals with metria when they have been separated and have had different attendants. We can not compare the mortality from metria in large hospitals and that of cases treated in their own homes. We are very deficient in statistics of the mortality of metria in hospitals, and in private practice. I have repeatedly been called in consultation to cases of metria in the better class of patients, and in forty years' experience I have never seen one case recover in private practice. I believe the mortality from metria to be greater in private practice, with all its advantages, than in hospitals; what then becomes of the argument that the fatality is in proportion to the number congregated together. There is a close analogy between puerperal fever and pyemia. There are epidemics of purulent diseases. This constitutional condition tends to explain the mortality of metria. When we speak of puerperal fever we must avoid all hair-splitting distinctions; we must not talk of strong lines of distinctions between metria and uterine phlebitis, and diffuse peritonitis, and so on, or between primary and secondary local disease. Between local and essential affections there are plenty of distinctions laid down in the books, but the physician who looks nature, in the face will set his own value upon them. A distinguished man, a pupil of mine, for fourteen years the principal surgeon at Ballarat with a population of 40,000, writes me that the principal diseases there are erysipelas and puerperal fever, that they have no lying-in hospital, that the women are all delivered in isolated houses or cottages, and that the less said about the mortality from metria in Ballarat, the better."

Dr. Murray: "Wished to ask Dr. Stokes at what time he was called in to see those cases in private practice which were all fatal, when he did not get an opportunity of exercising his great judgment and experience."

Dr. *Stokes*: "At all stages; and with the assistance of the most eminent men, both obstetrical and otherwise."

Dr. *Henry Kennedy* said: "Epidemics have always existed, affecting the human family, domestic animals, indeed even all animate creation and vegetable life itself, under every conceivable condition, in summer, winter, wet, dry, on the land and ocean; the law regarding them seems to be as universal as that of gravitation itself; and, no doubt of it, the Deity, for His own wise purposes, ordained that it should be so, and I believe it will not end till time itself is no more. It is this universal agency that contributes to the spread of epidemic disease, and over-crowding and contagion play but a very insignificant part, if any, in it. I have very little faith in contagion itself as a means of spreading disease. The health of the poor, especially in large cities, is always below par, and when epidemic influences prevail among them parturient women are just the parties to be affected by it. The analogy between an amputated thigh and the inner surface of the uterus after delivery is complete. All parturient women are not attacked by metria because all are not in the same state of health; a really healthy woman will not take metria; an unhealthy one is quite capable of engendering the disease within herself.

"I would advise that the health of the women about to be confined should be closely inquired into; and, as the great majority of those confined in the Rotunda apply personally for a ticket, I would then have the inquiry instituted. Only render the health of the women good and I have the strongest conviction they will pass through their confinements with safety to themselves and no risks to those about them. Our hospitals are noble charities, they are, however, human institutions, and therefore imperfect, yet they have conferred incalculable benefits; their imperfections may be remedied in a great degree at a nominal cost; they should be left as they are and not remodeled in any way."

Dr. *John A. Byrne* said: "It is better not to be positive about zymotic diseases having one common origin; and although when metria is prevalent other zymotic diseases often prevail, yet we have no marked data sufficient to warrant us in coming to the conclusion that there is any one single zymotic influence, and that all zymotic diseases spring from, or are developed from the same germ. In the treatment of metria I would in no instance use the lancet. Leeching must be practiced with extreme caution. No doubt, in cases of metritis, or peritonitis, or metro-peritonitis, leeches cau-

tiously applied over the affected region are useful, but in metria I would not leech and leech again until pain is abated or removed. I would prefer opium, poultices, pure air and watching the moment to administer brandy, wine, quinine, thus endeavoring to prevent the tendency to death by exhaustion. We know how rapidly tympany, diarrhea, effusion into the bronchial tubes, collapse, set in; and to apply 60 or 100 leeches to the abdomen of the unfortunate woman whose whole system is thus pervaded by this metrial poison is temerity indeed. In simple peritonitis, or metritis, mercury, in any form, must be exhibited cautiously. By interfering with the efforts of nature, which never sets up an inflammation of this kind without some object, we may do premature mischief even in mild cases. But I can not too strongly condemn the exhibition of mercury in anticipation; as well might the surgeon on the battle field probe a vital part in search of a ball that had never penetrated, or amputate a limb for an injury about to be received. I accept the classification of the whole family of puerperal diseases under the name metria. On this broad foundation of zymotic metria the author has raised up his thirteen already famous propositions:

"No. 1. There is no rejecting this.

"No. 2. The theory of the origin and the elaboration of the puerperal poison is the keystone of the proposition, and it amounts to nothing more than a very ingenious theory to define the mysterious origin and mode of propagation of zymosis. If this explanation of the origin of metria be the true one, it would differ in some respects from other zymotic poisons. Does a healthy person become first the generator and then the imbibitor of scarlatina? Or again: a patient is in hospital for some wound or accident; there is not a case of erysipelas in the ward; suddenly from some cause erysipelas makes its appearance; did the patient first generate and then absorb the poison of erysipelas? Is it not more probable that pyemia took place from the zymotic condition of the air, and that the blood thus poisoned exhibited those manifestations. The theory is very unphilosophical. The laws of zymosis are too little understood to found a theory of such importance upon a mere hypothesis.

"No. 3. I must withhold my consent to this proposition. The very statistics of the Rotunda given in the paper, especially for the last fifteen years, disprove it. And so will the statistics which I will give hereafter.



"No. 4. This proposition involves a paradox, for if metria has its habitat in a hospital, it must always be present in it. Besides, every patient entering the habitat would be almost certain to be attacked with the disease, which is not the case.

"No. 5. In the first and second propositions it is, as I believe truly, asserted that metria is a parturient poison; this proposition asserts that it is traceable to other zymotic diseases. The individuality or essentiality of metria can not be established at the same time that it is proven to have its origin in some other zymotic disease, for the one proposition negatives the other.

"No. 6. Although I disbelieve in the contagiousness of metria, yet I do not believe that contagion is the strongest element in continuing it in hospital. I have seen the disease attack, perhaps one, two, or more out of several patients, in the same ward, all of whom were healthy; then it would make its appearance in another part of the house. The French physicians are agreed about its infectious nature, but they differ in opinion about its contagiousness. M. Danyau thinks true puerperal fever highly contagious, that it is communicable from one patient to another, and that it may be conveyed to patients by attendants. M. Depaul goes further, and thinks that under certain conditions it may be communicated to non-pregnant women. He says that in the year 1839, a very severe epidemic of puerperal fever raged at the maternity, while under his management. On one evening, one of the female pupils, Mademoiselle D., while in the act of washing the genital organs of a patient suffering from a severe puerperal fever, suddenly experienced a most painful sensation which she referred to the emanations which she had respired on raising the bed covering, and she declared she felt quite ill. On that very evening she was attacked by rigors. The belly became very painful, the pulse small and frequent. Soon after, vomiting, a diarrhea set in. The vomited matters were green, and all the other symptoms of puerperal fever were well marked. She died on the third day. On making a *post mortem* examination, all the appearances of puerperal peritonitis were manifest. He adds that this young woman was not in any condition similar to that of a parturient woman, she being a virgin, and not at a menstrual epoch.

"M. Tarnier cites two cases in non-pregnant women; one died, one recovered; both were at the menstrual epoch.

"M. Trousseau, quoting an essay entitled '*On Puerperal Fever in the Female, in the Fœtus, and in the newly-born Infant*,' says,

'I wish that he had added amongst the wounded of both sexes residing in the proximity of lying-in hospitals;' and he goes on to demonstrate the evil effects of this poisonous influence extending from those establishments to the medical and surgical wards of neighboring hospitals.

"M. Dubois questions the contagiousness of metria; so does M. Gerard; M. H. de Chegoin does not believe in direct contagion; M. Cazeaux and M. Legroux think it contagious; so that all eminent men are not agreed upon this subject.

"No. 7. If it be true that metria is confined to certain localities in its occurrence, then the lying-in hospitals would never be free from it. This is a dangerous and insidious proposition.

"No. 8. Certain wards are more affected by it than others. Some wards are more healthy, better ventilated, have better nurses, and other circumstances may also modify the amount of disease in different wards of a lying-in hospital. It is implied that certain hospitals are never free from the scourge, while others pass unscathed. It has, however, long been observed that when the disease makes its appearance in a large city, almost every lying-in hospital is simultaneously attacked. No doubt there is a cause why metria generally selects a place where there is a large assembly of parturient women; but it must also be remembered that the disease commits, occasionally, ravages external to an hospital, and in places remote from one.

"No. 9. We all must admit that metria is of much rarer occurrence in patient's houses than in the large lying-in hospitals. It is on the ground of this and the following propositions that this battle must be fought.

"No. 10. We must refute this proposition or concede everything. The paper itself refutes it. It asserts that metria does not occur in small lying-in hospitals, or in cottages, and it then refutes the assertion, in the best manner possible, by giving the statistics of three small hospitals in which it does occur. The master of St. Ann's lying-in hospital, Killarney, which was opened on the first day of the year 1866, writes me under date of 13th May, 1869, giving the statistics of his hospital for that period; total number of confinements, 139; deaths, 3; rate 1 in  $46\frac{1}{3}$ ; causes, hemorrhage, one, rupture of the uterus, one, peritonitis after craniotomy, one; no symptoms of metria in any. He adds, 'I have seen some dozen cases of metria during the same period among out-patients, in a district whose average of births in the year would be 120.' Now

this case strikingly illustrates the importance of distinguishing deaths from metria, from deaths occurring from other causes in lying-in hospitals. If the death rate of St. Ann's appeared in a statistical table as 1 in 46, we would feel very much inclined, according to the doctrine of this paper, to look upon this hospital as one in which metria had its habitat, whereas there never has occurred a single case of metria in it. Dr. McClintock has forcibly shown that the deaths occurring in lying-in hospitals from puerperal fever, and from other causes, are in fact very nearly equal. And I would refer you, also, upon this point, to his very reliable statistics of private practice. This point can not be overlooked in estimating the death rate of any system, and yet it is wholly ignored in the indictment brought against hospitals. Those who look upon metria as an independent disease, epidemic in its nature, and not depending absolutely upon over-crowding in a hospital, will feel their position strengthened by the reference made in this communication to the outbreak of metria in a district away from the hospital, and which was of such severity that 12 in 120, or 1 in 10 died in their own homes. There can not be a stronger proof, or illustration, of the occasional outbreak of the disease, and of its independent origin, than this circumstance. Certainly the hospital was not the nucleus of the poisonous influence. I will give two more examples of freedom from metria in hospitals. The maternity of the North Union workhouse, for the twelve years 1857-'69, had 1067 deliveries; death rate from metria 1 in  $355\frac{2}{3}$ , from other causes 1 in  $533\frac{1}{3}$ , total, 1 in 233 2-5. Compare this with the death rates of the Rotunda for the same period. What is the explanation of the striking dissimilarity? The patients in the Rotunda were chiefly citizens, many of them primiparæ, many of them unmarried. However, 570 in the workhouse, or more, if the benefit of doubt was not given, were unmarried. But the women confined in the workhouse were chiefly in the prime of health, coming from the country; whereas those coming to the Rotunda were already in a delicate state, enfeebled from disease and poverty, and, in many instances, already tainted, or infected with, or predisposed to disease. In the South Union workhouse, for three years 1866-9, the number of deliveries was 396, deaths 5, or 1 in 79 1-5, only one case of metria. The only thing like an outbreak of metria in the hospital was about twelve years since, when a patient suffering from fatal typhus was brought in to be confined, and several cases of metria occurred soon after. From the mater-



nity of Sir P. Dun's hospital in the year 1868-9, 336 women were attended at their own homes, two died, neither of them from metria. We can not doubt the correctness of this report, because it bears evident testimony of the handiwork of that

“‘Light divine,  
That deigns on dark ‘*obstetricy*’ to shine.’”\*

“This paper says that the increased mortality bears nearly a direct proportion to the increased numbers inhabiting each building. And, having enunciated this self-evident platitude, the author proceeds to draw the most extraordinary distinctions, which he terms ‘comparative results.’ He assumes the mean of the mortality of three small hospitals, 1 in 282, as the standard by which to judge of all lying-in hospitals. But there is a considerable variation in the mortality of these three small hospitals. Why not select either one of them as the standard, and say that every lying-in hospital must have a similar death rate. Or why not include the death rate of St. Ann’s hospital, in which no case of metria ever occurred, with the three; thus, the mean death rate of the three is 1 in 282, that of St. Ann’s 1 in 46, the mean of the four would be 1 in 223. Or why not assume any other conceivable arbitrary standard. Some of the comparative results are that 2 out of 3 die in Liverpool who should not, 8 out of 9 die in Dublin who should not, and 17 out of 18 die in Paris who should not die. Such conclusions, so vital, so revolutionary, could only be arrived at, upon the arbitrary standard suggested, by the combined results of the three lying-in hospitals specially selected, to the omission of others, whose death rate would have quickly raised this low standard of mortality to a level nearer to that of similar institutions. This is the cardinal point of the whole discussion. The author’s method of reasoning is to take for granted the conclusion which he undertook to demonstrate, *petitio principii*, the most inexcusable of sophisms. As statistics of Paris hospitals have been given, I will also quote the statistics of six French

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\* The Rev. Dr. Haughton, Fellow of Trinity College, an active governor of Sir P. Dun’s hospital, a bachelor, of large attainments, true Irish versatility, and the most captivating humor, was taking a prominent part in the newspaper discussion of Dr. Kennedy’s paper.

hospitals for four years, taken from the French Academy of Medicine's printed report of its discussions upon this subject:

## I.—MATERNITÉ OF PARIS.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1852	2,860	46	1 in 62
1853	2,849	72	1 in 39
1854	3,185	1	1 in 3,185
1855	2,464	12	1 in 205
1856	2,488	99	1 in 25
Total	13,836	230	1 in 50

## IV.—HÔPITAL SAINT ANTOINE.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1852	86	4	1 in 21
1853	115	5	1 in 23
1854	288	8	1 in 36
1755	344	8	1 in 43
1856	393	5	1 in 76
Total	1,226	30	1 in 40

## II.—CLINIQUE D'ACCOUCHMENTS.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1852	1,233	22	1 in 86
1853	847	32	1 in 26
1854	1,003	22	1 in 45
1855	1,266	26	1 in 48
1856	639	32	1 in 19
Total	3,979	134	1 in 37

## V.—HÔPITAL SAINT LOUIS.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1852	660	1	1 in 660
1853	693	2	1 in 346
1854	820	0	0 in 820
1855	763	5	1 in 152
1856	813	1	1 in 813
Total	3,748	9	1 in 416

## III.—HÔTEL DIEU.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1852	1,000	16	1 in 69
1863	1,208	39	1 in 30
1854	1,439	36	1 in 55
1855	1,218	16	1 in 76
1856	1,641	73	1 in 22
Total	6,506	170	1 in 38

## VI.—HÔPITAL LARIBOISIÈRE.

	Total Deliveries.	Deaths from Metria.	Mean Proportion.
1854	193	9	1 in 24
1855	505	22	1 in 22
1856	685	26	1 in 26
Total	1,392	56	1 in 29
Total of the six hospitals:	31,667	629	1 in 50½

"This table shows that the death rate does not bear a constant ratio to the deliveries, and that over-crowding is not generally contemporaneous with a high death rate. Observe also that the general surgical and medical hospital, Hotel Dieu, has a better death-rate than the lying-in hospital Clinique d'Accouchment.

"As to the treatment of metria, that is a question of prevention, not of treatment. It may not be improper to recall the opinions of eminent Frenchmen upon this subject. M. Trousseau does not think the disease depends on over-crowding; he believes that contagious miasmata, producers of surgical typhus and puerperal typhus, are constantly lurking in hospitals, and that at certain periods, and without a cause which we can define, they generate in the system and suddenly explode in either a sporadic or epidemic form. M. Depaul says that metria is exclusively developed in houses or hospitals in which are collected, in large numbers, women in their confinement; that the cases in private practice emanate from the hospital; that the poison once engendered is transmitted more surely and fatally according as the number of women assembled is considerable; and he advises home attend-

ance as the only remedy. M. de Chegoïn thinks a crowded hospital a focus of contagion. M. Cruveilhier says, that in order to prevent the periodical returning of metrial epidemics the large lying-in hospitals must be suppressed, and attendance provided at the women's homes, in addition to which there may be some small hospitals, outside of Paris, in which each woman may have a separate apartment. M. Danyau would increase the number of lying-in hospitals to the greatest extent, make them small, and place them as far away from other hospitals as possible. M. Guerin demands the suppression of lying-in hospitals. M. Dubois thinks the metrial epidemic influence is, in the majority of cases, in the first instance external to the hospital, that lying-in hospitals can not be suppressed, and the anticipated benefits would not accrue if they were. M. Legroux says the epidemic cause is independent of over-crowding, but it strikes precisely there where its victims are in the greatest number. There is, therefore, considerable difference of opinion about the matter among Parisian physicians of great celebrity.

"Whilst, therefore, agreeing with those who are of opinion that, in an educational point of view, large lying-in hospitals possess the greatest advantages, and are moreover attended with the greatest benefit to the poor in many respects, yet I think, on the whole, external attendance, on an extensive scale, combined with an internal accommodation limited in extent, will be found to be the best system, and the one most free from a very large death rate; but I can not agree that the isolation of patients in huts, and the closing of the wards of the grand old Rotunda, will put an end to the scourge of metria among lying-in women."

Dr. Charles F. Moore said: "I desire to speak of the habits of the community, and the conditions of their dwellings, that seems to me to predispose to metria, as well as erysipelas, scarlatina, measles and typhus. I do not believe that hospitals, whether lying-in or general, exert any injurious influence upon the health of the community; on the contrary they are of the greatest benefit in arresting the spread of diseases of a contagious nature. The causes of fever are great inanition, large evacuations, raw, indigestible food, foul, stagnant, corrupted air, intense application of mind, despondency, want of sleep for a long time, sedentary life, great fatigue, cold and moisture, human effluvia, contagion. These are greater in the homes of the poor than in hospitals. My estimate of the value of hospitals has been increased by my per-



sonal experience in Africa and China. Dr. Barnes, of London, says that, for one case of metria among the patients of the Royal Maternity Charity, he saw ten among that class which never enter a lying-in hospital. The Registrar General of England and Wales gives the mortality, from all causes, of women of the age of 25-35, their most prolific age, .992, or nearly one per cent. In 58 districts not affected by the presence of hospitals, there was similar mortality for the same class, of 1.2 per cent. and in many county districts, all the conditions being the same, the mortality actually exceeds 1.4 per cent. It would be well if such districts had hospitals. The true starting point for us, in our efforts to lessen the mortality of that most important class of patients, parturient women, is to prevent their relaxed and debilitated state of system. There is no need that I should take the society into the squalid rooms of the poor of this city to exhibit the miserable food they eat, and the terrible mental depression they experience. There is no doubt of the connection between metria and scarlatina\*. The medical officer of the Privy Council, in his report of the epidemic of metria at Maidenhead, calls attention to the connection between metria and scarlatina, the propagation of metria by midwives, and that that district has no lying-in hospital. The facts collected by Prof. Braun, of Vienna, strengthens the belief that metria occurs chiefly, if not entirely, from the epidemic constitution of the period. Let us then prevent metria by improving the sanitary tone of our masses, as well as of those in better circumstances."

Dr. *John Ringland*, master of the Coombe, said: "As president of the society, I deem it my duty to say that Dr. Kennedy can not justly complain that this discussion has not been limited to an oral debate, or the speeches to definite periods of time. It has been said in certain medical periodicals that the debate seemed to take the form of an overwhelming organization for the defense of individual hospitals, and the extinction of Dr. Kennedy. It must be remembered that, for a long time, rumors have been floating about intimating a withdrawal, or at least a revision of the Dublin hospital grants, and that coincident with these, at an inopportune

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\* Of 86 cases of puerperal disease after simple labor, in private practice, more than three-fourths of the patients had been exposed to some kind of animal poison, in 36 instances to the poison of scarlatina. Dr. Braxton Hicks, of London, *Lancet*, 19th Feb., 1870.

time, this formidable indictment against the two lying-in hospitals is presented. It is our bounden duty to disprove the charges contained in that paper.

"I am altogether at issue with the doctrine of treatment proposed in this paper. All diseases are now of an asthenic type. The treatment in which alone I have confidence, based now on a very lengthened experience, is the early employment of turpentine, both internally in repeated doses of not less than a drachm each, and externally in the form of warm fomentations, the steady use of opium in grain doses every third hour, together with the free but guarded administration of quinine and iron, and the judicious employment of wine, brandy, and carefully prepared nourishment. I may add, that this treatment is that which has been invariably adopted by myself and my colleagues, at the Coombe hospital, for many years; is, moreover, I believe, that of the Dublin school, and is more consistent with the pathology and nature of the disease we are now accustomed to meet, than the depletion and mercurialization recommended in this paper. Our hospitals have been almost branded as pest-houses. It is charged that in the Coombe hospital 3 out of 4, or 75 per cent. of the whole mortality die who should not. I know not by what mode of calculation this conclusion is arrived at. Certainly it can not be based on the return for the last seven years furnished Dr. Kennedy at his request; and the tabular statement subsequently submitted to the society by Dr. Kidd, in no wise corroborates it. During the fifteen years included in that return, 89 patients died from all causes; of these 55 succumbed to metria, being only at the rate of 62 per cent., and even the addition of the 15 patients laboring under some form of puerperal fever—who were removed to other hospitals, and of whose fate we are ignorant, but whose deaths are here assumed for argument sake—would raise the death rate from metria to but 67 per cent. of the whole mortality. If the calculation is made on the returns of the last eight years of that period, namely, from 1861 to 1868 inclusive, wherein the deaths from all causes, as shown in the return submitted by Dr. Sawyer, amount to 54, of which 30 are attributable to metria, the death rate therefore amounts to but 55 per cent. In estimating the value of these relative proportions, however, it must be remembered that these numbers respectively include the deaths from puerperal fever arising not merely from contagion, but also from every other possible cause. In order, therefore, to ascertain the death rate of

an hospital from metria acquired by contagion, we must, I maintain, first eliminate every case arising from epidemic causes, from contamination antecedent to labor, *post mortems*, or the practice of general hospitals wherein infectious diseases are under treatment, from operations or manual interference, or mental depression; in fine, from any and every cause that may be designated individual. When this is done, the number from contagion will be reduced to a very small number indeed; and it is only this number with which hospital management can be in any wise charged, and which will bear to the fullest extent, comparison with the 75 per cent. mortality attributed to contagion in this able paper. But is it meant that of the deaths *which result from metria* the 75 per cent. referred to emanate from preventable causes. If this be so, let us see how far it will stand the test of calculation. It will be seen on reference to the return of the Coombe hospital for the last eight years, 1861 to 1868, furnished by Dr. Sawyer, the number of deaths from some one or other of the several varieties of metria amounted to 30; or, if limited to the seven years from 1862 to 1868, included in the statement forwarded to Dr. Kennedy at his request, to 28. Of these, whether taking the eight or the seven years' period, there are attributable to individual causes 16 cases, irrespective of 4 suffering from all the mental depression of seduction; thus, the number is reduced in the one case to 10, and in the other to 8, being at the rate of 33 per cent. in the former instance, and of 28 per cent. in the latter; and it must not be forgotten that these respective numbers of 10 and 8 may be still further considerably diminished by the abstraction of all cases wherein the disease emanated from epidemic or other causes already referred to. On whichever then of these hypotheses we form our calculation, the conviction must force itself upon us that the calculations in the case of the Coombe hospital are based on error, the conclusions are wrong, and the allegations incorrect.

"My opinion of the relative value of the internal and external treatment of midwifery cases is that each has its advantages and disadvantages, its merits and demerits. A life may be occasionally lost in hospital through the medium of contagion, ten in eight years as a maximum, as already shown in the Coombe, but many lives are saved through its intervention, which in all probability would have been lost outside, owing to the want of proper treatment, constant care and suitable nourishment. One is of incalcu-



lable value to some claimants for relief, to many the other alone is available. These considerations, and an experience of both systems for more than a quarter of a century, have led me to the conviction that each is a necessity, and that the union of the two in one institution is the only arrangement compatible with the exigencies of our metropolitan population. Such is the arrangement now for a considerable time carried out in the Rotunda and Coombe lying-in hospitals. This plan of grouped but isolated cottage or pavilion hospitals, with only one, or at most only two beds in each isolated room, is impracticable, because of the enormous expense necessary to maintain such an institution. The Rotunda, with all its resources, is scarcely able to maintain itself in its present arrangement, and it would be impossible for any institution upon the proposed plan to maintain itself financially in Ireland. The plan is also open to serious objections on moral grounds. If the hospital was constituted of a large number of these cottages, each with its nurse, its ward-maid, and perhaps with its pupil midwife, I would defy any proper supervision being exercised over it. An institution upon such a plan for the relief of lying-in women would soon become an establishment for the creation of lying-in women.

I thank the several members of the society and our visitors for the high tone and good temper which have characterized our debate. I have also to return my most sincere acknowledgments to Dr. Kennedy for the great care and trouble he has taken in the preparation of the able and remarkable paper he has submitted to our attention, and for the tact and ability with which he has developed his views; and I feel that I am only expressing the wishes of the society in thanking him for being the means of eliciting so admirable and able a discussion."

*[Concluded in next number.]*

*Art. II.—Therapeutical Action of Chloroform.*

By Dr. GEO. W. AKERS, St. Louis, Miami County, Kansas.

In the *Lancet and Observer*, vol. xi, No. 6, I reported a case of infantile convulsions, cured by the internal administration of chloroform. In that article I took the position that I was convinced that chloroform given internally would effectually control the convulsions of infancy. Since then I have been testing the therapeutical action of the medicine, wherever an opportunity would present itself; and I find by looking over my case-book that it has universally been successful, in the convulsions of infancy, not having failed in a single instance in speedily controlling the disease, and giving relief to the little sufferer. However, I do not want to be understood as claiming that the remedy will relieve and cure convulsions dependent upon an abnormal development of the brain; or from abscesses within that organ. Sharp spiculæ of bony matter formed in the dura mater, or from effusion of blood into the brain substance, caused by external violence: these I consider are among the incurables, by any known remedies, unless it be by the art of surgery. As a remedy in congestion chloroform is not surpassed; hence its value in infantile convulsions, as a vast majority of the cases that occur in this climate are produced and accompanied with more or less congestion of the brain, its membranes, or of the spinal marrow.

Prof. Simpson gives a number of cases of infantile convulsions treated and cured with chloroform by inhalation, but the use of the medicine in that way is attended with so much danger that it is not, nor never will become popular with the profession. This objection can not be urged against its internal use, as I believe there is not a single recorded case *proving fatal* from its internal administration.

A. P. Merrill, M. D., of Louisville, Kentucky, in a communication to the *Medical and Surgical Reporter* vol. xxi, page 254, says: "I have given it in intermittent and remittent fever; in the convulsions of children, proceeding from chill and other causes; in colic and congestion of the stomach; in cholera, cholera morbus diarrhea and dysentery; in epilepsy, apoplexy, delirium tremens, and *congestion of the brain* (the italics are mine), in pneu-

monia, congestion of the lungs, hemorrhage, diabetes, albuminuria, sunstroke, concussion, uræmia, eclamsia, and other forms of disease caused or accompanied by congestion.

In a good many cases I have given chloroform to children in convulsions and to adults prostrated by sunstroke, concussion and hemorrhage, after all hope of recovery had been abandoned; and when I would not have ventured to pour into the mouth an equal quantity of water; and in not one of those experiments have I been unsuccessful.

A man of eighty-four years has in this way been rescued from sudden death in congestion of the brain; and a child of eight days relieved of an equal danger from lockjaw. \* \* \* \* My doses have been from a single drop to two teaspoonsfull, and in no case has injury resulted from such use of the remedy."

I have never used chloroform so extensively as Dr. Merrill professes to have done, but I have given it in a number of the above enumerated diseases and with the happiest results. On one or two occasions I have used it in hepatic colic, and found it a much better anodyne than opium. As a hypnotic anodyne and anti-spasmodic remedy it gives me better satisfaction than any I have ever used. It is but seldom contra-indicated in any disease where an anodyne, hypnotic, or anti-spasmodic remedy is desired. In a great many complaints where it is necessary to give such medicines, opium and its preparations—heretofore the great sheet anchor—are contra-indicated on account of the constipation of the bowels. This is not so with chloroform, as it can be given to allay pain when the most obstinate constipation exists, without any evil results; and in fact I have often thought it acted as a valuable auxiliary to other remedies given to overcome that difficulty.

Dr. H. Hartshorne has used chloroform for a number of years, internally, and finds it a safe anodyne and soporific. He has given it in doses of from fifty to seventy-five drops, each half hour, for hours together, without producing any evil results.

Chloroform, as early as 1832, was given internally by the Ives of New Haven, in asthma, spasmodic cough, scarlet fever, and atomic quinsy with favorable results.—(See *Silliman's Jour.*, vol. xxi, pages 406, 407.)

Dr. Formby used it in hysteria in 1838. Mr. Tuson, of London, in cancer and neuralgic affections in 1854, and by M. Guillot, of Paris, in asthma, in 1844.

Dr. Dalton, of Ohio, has used it in intermittent fever with suc



cess, and Dr. Delioux recommends it for the same purpose. Dr. Aran has used it successfully in lead colic, administered by the mouth and rectum, and applied to the abdomen. It has been given with success by Dr. Osburn, of Dublin, in hypochondriasis; and by Dr. Gordon to allay nervous excitement and procure sleep.—(See *U. S. D.* 12th ed. page 962.)

From the above, and from my own observations, I have been led to believe that chloroform as an internal remedy is one of our safest and best medicines, and in its therapeutical action upon the human system as a curative agent, one of the very best belonging to the pharmacopœia.

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*Art. III.—A Malformation.*

By W. DICKEY, M. D.

Miss L. M. B., aged sixteen years, of pale complexion and frail constitution; was of consumptive parentage on her father's side; health only moderate from childhood. Eighteen months since her general health began to decline, with an increase of cough, with which she was always afflicted.

She never menstruated, but monthly phenomena such as pain in the back, with heavings in the hypogastric region, were evidences that the efforts of nature were at work to establish that function.

Her appetite was always pretty good, but the assimilative powers were poor. No diarrhea since last August. Had night sweats occasionally for the past eighteen months. During the last few months of her life there was green purulent expectoration. But very little difficulty of breathing at any time. In September, 1868, I was requested by Dr. Prichet, her attending physician, to examine her lungs by auscultation and percussion. Configuration of chest: general appearance contracted; development of right side equal to that of the left.

EXAMINATION. Percussion elicited a dull sound over the entire left lung. Right side unusually resonant. Auscultation confirmed the physical sign of extensive tubercular deposits. At this time no special indications of tubercular softening. Subsequently, however, softening took place, as purulent expectoration was a constant symptom. Heart—its position unusual. In place of left

side, strong cardiac impulses were heard on the right side; so strong that its impulses indicated a hypertrophy, or at least an aneurismal heart.

AUTOPSY, twelve hours after death. Present, Drs. Prichet, Cleaveland, and myself. On opening the thorax we found the left lung studded with tubercles, principally of the gray character; some, however were yellow, and in the process of softening. Lung in left side somewhat larger than usual, but consisting of two lobes as ordinary. No lung in the right side, not even a sediment at the bifurcation. Between the largest of pleura the space was clean and beautiful. No lung had ever existed. Heart in the mediastinal space, but in the right side, corresponding to a natural situation in the left. Its walls were thickened and cavities somewhat enlarged.

REMARKS. It is to be regretted that a thorough examination was not made, Permission was given to make the examination but a short time before the hour appointed for burial. The malformation consists in but one lung. So far as I know there is not a single instance on record of the kind. The situation of the heart is not to be wondered at. As there was no resistance in the right side, the lung in the left would evidently force it over to the right side.

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#### *Art. IV.—Animal Vaccination.*

(Extract from Report on Vaccination made to the Ohio State Medical Society.)

By WM. B. DAVIS, M. D., of Cincinnati.

Vaccination with primary cow-lymph is but seldom performed, on account of the severe constitutional effects which attend its evolution. With a view of modifying these effects, which experience has proven bear no relation to the protection given, and were not essential to it, the primary cow-lymph is passed through a succession of heifers and then transplanted to the human subject, and this is termed *Animal Vaccination*.

Those who favor animal vaccination assign the following reasons for so doing :

1. The vaccine virus loses its protective qualities by successive transmission through the human subject.

2. Human vaccine may convey other diseases, particularly syphilis.

3. Animal vaccination is the surest method of obtaining and transmitting the vaccine virus in its original activity, without any danger of syphilitic taint.

Those who oppose it, say that the above claims are mere assumptions which time and experience alone can establish. On the contrary, it is claimed that the experience of the past seventy years has demonstrated:

1. That vaccine virus improves upon each remove from the cow or heifer, until it is fully humanized. Then it presents the Jennerian aspect, and has arrived at its full period of maturity, when its infection and protection are the greatest.

2. Animal vaccine is more uncertain in producing infection, is more violent in its effects, when successful, and gives no greater immunity against small-pox than human lymph.

These latter propositions are fully sustained by the testimony of those physicians of our country who have given the most attention to the subject.

The English authorities are almost a unit in support of them. Dr. Seaton, in his *Handbook on Vaccination*, calls attention to the fact, that the primary cow-lymph obtained at Beaugency, in 1866, after passing through three heifers, was used at the Academy of Medicine, Paris, and was found to improve by a few transmissions through the human subject. When some of it thus humanized, and some of it continued through animals, were used in the vaccinations of the same subjects, the vesicles of the humanized lymph were manifestly the finer and better developed.

Hebra may be cited as an authority, if not an exponent of the German profession. Concerning him, my Vienna correspondent, before alluded to, writes: "In regard to Hebra's opinion about vaccination, I can only state that it is the same as that which prevails mostly in the medical world now. \* \* \* Further, no return to the cow for fresh matter is necessary. The lymph derived from the cow is not nearly so certain to infect, is much more, violent in its operation when it does succeed, and has no more protective power."

Animal vaccination has had a strong hold on France for the past six years; indeed so general has its use become, that, to-day,



human vaccine lymph can scarcely be found in any part of its territory.

M. Depaul, the official Director of Vaccination, espoused animal vaccination in 1864. Since then, his eloquent tongue and fertile pen have made all France run wild upon the subject. I have now before me nine elaborate papers, which he has very kindly sent me, written by him at different times, between 1864 and 1870, strongly advocating Animal Vaccination, The degeneration of human lymph, and The conveyance of syphilis by means of the latter.

From the first, these views met with a powerful and persistent foe in the person of M. Jules Guérin. He contends that a comparison of the evolution of the two vaccines evince a marked superiority in favor of human vaccination, and allow us to infer a like superiority for its preservative virtue.

Jennerian vaccination, he says, is cow-pox spontaneously modified by the human organism—that is humanized. Animal vaccination is the artificial inoculation of cow-pox in the heifer, and direct vaccination from the heifer to man, without the intervention of the human element. He cites statistics to show that the success of animal vaccination compared with human vaccination, is as ten to thirty. Nevertheless, animal vaccination became popular, and all France bowed down and worshiped The Calf.

The general use of animal vaccine in France, during the past six years, affords an opportunity, on a grand scale, of testing the comparative merits of the two vaccines.

Fortunately, we have a standard for comparison afforded us in Ireland, where vaccination was made compulsory in 1864, the same year that animal vaccination was introduced in France. In Ireland the vaccine lymph used was that furnished by the National Vaccine Establishment, which, as I have before stated, was obtained by Jenner himself from the cow, and has been perpetuated ever since by human transmission.

If the protective virtue of animal vaccine against small-pox is superior to human vaccine, we may expect to see it demonstrated by fewer cases of small-pox occurring in France, in proportion to its population, than in Ireland, during the period of 1864-70.

Let us examine Ireland first.

The following table is kindly furnished me by no less a person than the MEDICAL INSPECTOR OF THE PRIVY COUNCIL, England, Dr. Seaton, and is official:

The average annual deaths from small-pox in Ireland for the ten years preceding 1864 was 1,272.

Vaccination made compulsory from January 1, 1864. In 1864, deaths from small-pox, 854; in 1865, 347; in 1866, 187; in 1867, 20; in 1868, 19; in 1869, 3.

"There is not now (April 9, 1870), and has not been for nearly a year, any small-pox at all in Ireland."—*Seaton*.

Now let us turn to France and see how effectually animal vaccination has protected her from small-pox. The *British Medical Journal*, March 26, 1870, publishes a letter from its regular Paris correspondent, from which I extract the following: "In writing to the *Journal* on the 18th of October last, I alluded to the alarming prevalence of small-pox, the consequent panic, and the consequent demand for re-vaccination. Since that date the epidemic has continued; and latterly not only in Paris but also in other towns in France it has assumed formidable proportions and produced intense social uneasiness." April 30th, the same correspondent writes: "Animal vaccination has been a failure in this epidemic." For the week ending May 14th there were 179 deaths from small-pox in Paris, exclusive of deaths in hospitals:—population, 1,825,274. (In London for the same week there were two from small-pox, population, 3,170,754.)

The results of the comparison then, may be briefly stated: *Human vaccination* made compulsory in Ireland in 1864. On April 9th, 1870, there was not a case of small-pox in all Ireland, nor had there been for more than a year.

*Animal vaccination* adopted in France in 1864. May 14th, 1870, there is a formidable epidemic of small-pox prevailing in France which began in October, 1869, and shows no signs of abatement.

The French people are alarmed and all Paris is placarded with warnings of the small-pox, and the necessity of vaccination. Upon every corner gaudy posters inform you that certain doctors are prepared with heifers and will vaccinate from them at certain hours. Their offices and the adjacent streets are said to be thronged daily with an immense multitude seeking protection from small-pox by means of the calf. It has been estimated that Dr. Lanoix, one of the more popular vaccinators, has received 10,000 francs in one day from vaccinations. His worship of the heifer, and his beautiful street corner posters, have not been in vain.

Not to detain you with details I will say, that after an unparalleled faith in animal vaccination, and after a terrible opportunity

of testing its merits, the French physicians and people are losing confidence in it, and are returning to human vaccination.

Very recently the medical officers of the Bureau de Bienfaisance of the Seventh Arrondissement of Paris, have unanimously adopted and signed the following declaration in favor of human vaccination.

"We, the undersigned, medical officers of the Bureau de Bienfaisance of the Seventh Arrondissement, after examining, watching, and comparing the results of the vaccination service established at the Mairie of the Seventh Arrondissement with vaccine lymph taken from the heifer, are of the opinion that the results are most unsatisfactory, even in the case of infants; and that this system ought to be discontinued; and request that Jennerian lymph be placed at their disposal."

I shall close this division of my report by quoting from *La France* a just tribute to a great man: "There are occasions when it is a duty resolutely to fight against the opinions of the many and to show an uncompromising front to prejudices. It is in this spirit that for many years past M. Jules Guérin has, without truce and without giving an inch, conducted his brilliant campaign against animal vaccine. A campaign which has at last been crowned with success. The question is now definitely adjudicated, animal vaccine has fallen."



## Translations.

*The Second International Medical Congress.*(From Schmidt's *Jahrbucher*, April 30, 1870.)

By Dr. JAS. T. WHITTAKER.

The session was opened September 23, 1869, in Florence, by U. Bargoni, Minister of State. The following officers were elected: Salv. de Renzi, Naples, President; Bufalini and Bouillaud, Honorary Presidents; De Maria, Turin; Baccelli, Rome; Burci, Cipriani; Michelacci, Florence; Marcacci, Siena; Benedikt, Vienna; Engelsted, Copenhagen; Lombard, Geneva; Tindal Robertson, Nottingham; Lazarewitch, Charkow; Virchow, Berlin; Tessier, Lyons (the two last absent), Vice Presidents; Brugnoli, Bologna; Bos, Florence; Quaglino, Pavia, General Secretaries; Carrucio, Florence; A. Corvadi, Pavia; E. de Renzi, Genoa; Levier, Florence; Ponza, Alexandria; Faralli, Florence; Schivardi, Milan; Secretaries.

The discussion of the first question of the programme, prepared by the Committee of Arrangements, *marsh miasm*, was opened by Palaciano, with a letter from Salvagnoli on the sanitary police regulations required in malarial regions, particularly the dessication of marshes and the draining of brackish water. Umana, Cagliari, followed with a treatise on the malarial fever of Sardinia; and after Pantaleoni, Nizza had spoken on the causes and therapeutic regulations in general, and Fedeli on the treatment of the quartan fever, Spatuzzi concluded the session with a communication on the malaria of Lirithal.

In the afternoon session were read by Bos a short communication from Roth, London, on the great mortality of children in manufacturing cities, by Quaglino a valueless work of Crispino on hydrophobia, and by Tomaselli an "Essai critique sur la cachexie cardiaque." A lecture, by Schnitzler, Vienna, followed on laryngoscopy and galvano-cautery, then a request from Benedikt that

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the third meeting of the Congress should be held at Vienna; this was unanimously conceded in a later session.

At the beginning of the session of September 24th a motion was offered by Ghinozzi, which called forth a protracted and contentious debate. It was directed against the eighth article of the programme, which confined all transactions to the Latin and French languages. The motion was to the effect that the Italian language should also be admitted.

After partial acceptance of the motion, the discussion on miasm was resumed. Balestra, Rome, presented some suggestions in anticipation of his exhaustive work, soon to appear, on the development and nature of malaria—a work which is based on examinations of the air and water of the Pontinian marshes, and which promises to yield full confirmation to the view that miasm consists in organisms of the lower vegetation. Succeeding this were read a few remarks of Selmi on the air of Mantua. Then followed a speech from Baccelli, the contents of which were far inferior to its delivery, and a lecture from Lombard on the influence of climate and season in the origination of malaria.

The afternoon session was devoted to the communication of the commission appointed by the Paris congress on regulations for the limitation of venereal diseases in a work of eighty-eight pages. The points of the previous discussion were repeated (*vide Jahrbucher* 136, p. 279). Viennois, Lyons, reporter.

The discussion of malaria was continued in the session of September 25th; and after a long and unimportant debate a commission was appointed to undertake further investigations on miasm and malarial regions, and to present its communication to the next congress. (Seven appointed, Salvagnoli President.)

Herzen and Schiff closed the session with excellent objections to the assertions of Baccelli, borrowed from Burdock's Physiology, on the influence of the spleen on stomach digestion. In the afternoon session Baccelli recommended his wedge-shaped pleximeter for linear (?) percussion; and Pantaleoni, with the narration of several cases, the application of Chapman's ice bags to the spine in obstinate vomiting and dysmenorrhœa, as well as the endoscope of Cruise, for the recognition of neoplasms in the uterine cavity.

In the session of September 27th, after a discourse by Conti, Cosenza, on the occurrence of intermittent fever in the province Calabria, and one from Polli, Milan, on the sulphites whose febrifuge power had been lauded in the Paris congress; the second

question of the programme was proposed, viz., the local treatment of cancerous neoplasm. The importance of this subject, by Palasciano, was followed by the recommendation of the Thiersch injections of the nitrate of silver, by Albanese, on the basis of several individual observations; then the injections of carbolic acid by Paventa, followed by a letter from Neftel, New York, who claimed the perfect cure of a mammary cancer by electrolysis. Next came the reading of Lussana's treatise on the treatment of cancer by the gastric juice of the dog. [Which, with the lecture of Schiff, on the same treatment, delivered in the R. Museo di Storia Naturale, September 29th, will be printed in full in the next number of this journal.]

In the afternoon communications were offered by Toscano, Catania, on the value of urethetomia int.; by Arcoleo, Palermo, on the frequent occurrence of Albinismus in Sicily (in Palermo 59 Albinos for 250,000 inhabitants); by Mazzoni, Rome, on some circumstances to be regarded in the reduction of the luxat. incompl. ileo-pub., with narrative of a case; and by Macari, Turin, on artificial abortion and gastro-hysterotomy. In this discourse the first (art. abort.) is stigmatized as assassination, and a vote of the assembly to that effect desired; this was avoided by the protestations of Minetti and Morisani.

The third point of the programme, the treatment of gun-shot wounds, in relation to the progress of military science and international decisions, gave Palasciano and Mazzoni, in the session of September 28th, an opportunity of mentioning the number of regulations determined since the Geneva Convention, and of proffering a general request to support the improvements suggested by the Florentine Statist. Congress of 1867. In this connection was also discussed, both in this and in the session of September 29th, the fourth question, viz., the hygiene of hospitals and the value of treating the poor at their homes. Seitz, Borgiotti, Gritti, Dujardin, took grounds against the erection of large hospitals. Bouillaud and Minati for their erection; Pantaleoni for extension of out-door clinics; Mazzoni for rigid separation according to diseases; Borsatti for the erection of special houses for the tuberculous; and Timermans for asylums, which would give the phthysical mountain air in summer and sea-coast air in winter. Next statistical notices and descriptions of hospitals of Rome, Pisa, St. Petersburg, and Florence. The afternoon was occupied by Barellai with an applauded communication on the ospizi



marini (marine hospitals) of his erection for scrofulous children (six on the coast of the Tyrrh sea, and four on the coast of the Adriatic; altogether 610 beds). Giovanni exhibited a pincette for staphylophary, Lazarewitch an embryotome, and Pantaleoni concluded with a short treatise on essential fever.

The session of September 30th began with the consideration of the fifth question, on the influence of railroads on the general health. After a long communication, by Tassi, on the deficiencies of Roman railroads, Salvagnoli, Mucelli, Maccari, and Chierici descanted upon some of the conditions requiring change, particularly the deficient water drainage for running artificial marshes into the dams. It was desirable that all railroads should be under the direction of the sanitary police.

The sixth article of the programme called out Lombroso on pellagra, Engelsted on the diminution of disease and mortality in Copenhagen and several cities of Jutland after the introduction of good drinking water, and Arcoleo on the mortality of Palermo.

The discussion on the last point of the programme, the rights and duties of physicians according to the laws of various lands, and the necessary improvements in the same, was opened in the session of October 1st [four speakers].

In the afternoon session the proposition of Custiglionni for the incineration of the dead was earnestly supported by Coletti, Seydewitz, and Bergiotti. Herzen offered a short communication on the function of the spleen, and Balestra on remittent malaria in Rome.

The concluding session of October 2d was occupied with a number of short communications, viz., on sulphur as an antidote in poisoning by metals, by Bellini; De Maria, recommendation of quin. nitr. grm. 0.40--0.60 in intermittent; Arcoleo, case of glioma retinae; R. V. Vivenot, quin. sulph. as prophylactic against malaria; Zucchi and Besser, valuelessness of the same; Petrera, case of croup; Zurkowski, mineral waters of Schinznach; Nunez-Vais, observations on prolapse of the rectum; Seydewitz Simón's case of extirpation of a kidney; Schivardi, galvano-cautery.

The third meeting of the congress occurs in Vienna, September, 1871. Committee of Arrangements as follows: Oppolzer, Rokitsansky, Sigmund, Benedikt, Duchek, Schott, Wertheim, Wittelshoefer, and Pichler.

## Medical Societies.

## AMERICAN MEDICAL ASSOCIATION.

SECOND DAY—WEDNESDAY, MAY 4th.

Dr. *Maddox* inquired of the Chair what disposition had been made of the delegates from the District of Columbia, and asked information relative to their rights to seats in the Association.

The Chair informed him that all the delegates from the District of Columbia had been excluded.

Dr. *Maddox* then moved a reconsideration of the vote by which the District of Columbia delegates were excluded.

The motion was not considered, as the whole matter had been referred to the Committee on Medical Ethics.

Dr. *Alfred Stille*, of Pennsylvania, chairman of the Committee on Ethics, submitted a partial report, recommending that Dr. C. C. Cox be admitted as a delegate from Maryland, as the charges brought against him were too vague to receive the consideration of the committee.

Dr. *Keller*, of Kentucky, submitted a minority report from the Committee on Ethics, recommending that Dr. C. C. Cox should not have a seat as a representative from Washington, as he was not a resident of Washington; and moved its adoption.

After considerable discussion, the majority report was adopted.

The Secretary then read the titles of a number of papers for the consideration of the several sections; after which the Convention adjourned to 9 A. M. Thursday morning.

## EVENING.

In the evening the Association met, according to programme, in the United States Army Medical Museum on Tenth street. The entire Association, members and delegates, were present, many of whom were accompanied by ladies. The early part of the evening was spent in examining the objects of interest in the museum, which was highly praised by the visitors.

At 8 o'clock the Association adjourned to the lower ball, from which the desks had been removed and accommodations made for

the comfort of those present to listen to lectures from Drs. Otis and Woodward, of the United States army.

Dr. *George A. Otis* was the first speaker. His lecture was on the Resection of Joints. He exhibited many illustrations in which the operations made had been successful and the patients recovered. The lecture of Dr. Otis was of great interest, and was listened to with much attention.

Dr. *J. J. Woodward* then followed with a lecture on general anatomy and physiology, in which he illustrated the power of the artificial lights over the sunlight for micro-photography. Dr. Woodward was frequently interrupted by applause, as the excellence of the illustrations impressed the audience.

After the lecture of Dr. Woodward the audience adjourned to the Museum, where the examination of the specimens continued until a late hour.

#### THIRD DAY—THURSDAY, MAY 5th.

The Association was called to order at 9.30 A. M., President *Mendenhall* in the chair; *William B. Atkinson*, secretary. The reading of the minutes were, on motion, dispensed with.

Dr. *Antisell* then read the names of a number of gentlemen who were admitted as members on invitation.

Dr. *Sayre* asked that a committee be appointed to examine the charges circulated against him through the country. He requested that a special committee be appointed to report on the matter at this session.

Dr. ——— said that there being a difficulty between Drs. Sayre and *Ruppaner*, he objected to any committee being appointed, because the other party was absent.

Dr. *Murphy*, of Ohio, moved that the whole matter be referred back to the society at New York.

Dr. *Sayre* said that it was due to the Association that these charges be looked into.

Dr. *Murphy* said that the reputation of Dr. Sayre was not damaged in this society, and he therefore insisted on his motion.

Dr. *Keller*, of Kentucky, reported, on the part of the Committee on Ethics, that that committee had been forced by the press of work to return the papers in the case of Dr. Sayre for further consideration of the Association.

Dr. *Maddox* moved that the whole matter be laid on the table. It was so ordered.



Dr. *Yandell* then moved that the delegate that had been sent as a representative to the British Medical Association be heard.

Dr. *Pinkney*, United States navy, representative of the American Association in England, made a long and interesting report of his visit and observations to the medical schools of Britain. The report was listened to with much attention throughout.

A vote of thanks was tendered Dr. *Pinkney*, and the report referred to the Committee on Publication.

Dr. *F. G. Smith*, of Pennsylvania, chairman of the Committee on Nomenclature, submitted a report of the names of diseases, accompanied by a resolution recommending the adoption of the nomenclature of diseases prepared by the Royal College of Physicians at London.

Dr. *Underhill*, of New York, also read a paper on the same subject, which was laid on the table.

The resolution recommended by the committee was discussed at some length by Drs. *McDaniels*, of Alabama, *Logan*, of Louisiana, and others, who all held that revision of the nosological tables now in use was imperative.

The report, with resolution as recommended, was adopted.

Dr. *C. C. Cox* offered a resolution, which was adopted, for the appointment of a special committee to wait upon the Surgeon General of the United States, and to request the privilege of duplicating the photo-microscopic slides of the tissues, so admirably executed by the indefatigable industry and skill of Surgeon *J. J. Woodward*, to be prepared under the direction of said committee, and distributed at a fair price to such medical colleges and institutions as may desire their use.

Dr. *Bemiss*, of Louisiana, from the Committee on Nominations, reported the additional standing committees for the ensuing year, which report was adopted.

Dr. *Antisell* offered a resolution of thanks to the Surgeon General, United States army, for the beautiful and instructive exhibition of last evening, and recommending Dr. *Woodward* and Dr. *Otis* to the consideration of the Secretary of War as worthy of promotion for their efforts to advance medical education in the military service.

Dr. *C. C. Cox* then offered a resolution of condolence with the family of the late *Alden March*, of New York, and that a copy of the same be sent to Dr. *Alden March's* bereaved family. The resolution was concurred in.

Dr. *Stine*, of New York, introduced a resolution recommending the establishment of veterinary schools in the several states, and recommending the state legislatures to make appropriations for their support. Adopted.

Also, that one or more veterinary surgeons be associated with other physicians in the boards of health when they are appointed by the governors. Lost.

Also that veterinary surgeons be appointed to the army with the rank of full surgeons, and also in the Agricultural Department.

Dr. *Otis* moved as a substitute that the first clause, relating to appointments of veterinary surgeons in the United States army, be stricken out, and that the government appoint a veterinary surgeon to the Agricultural Department, with a suitable salary. Adopted.

The hour for special business having arrived—

Dr. *Storer*, of Boston, moved, upon behalf of the Gynæcological Society of that city, that the action of the Association in 1869, condemnatory of cards by specialists in journals of a strictly medical character, should be rescinded upon the ground of abstract right and long custom with reference to the insertion of such cards. Tabled.

A resolution was offered that a committee of three be appointed to wait upon Congress and request them to regulate the quarantine laws. Adopted.

The report from the delegate to the Canadian Medical Association was received and referred to the Committee on Publication.

Dr. *Stewart*, District of Columbia, offered a resolution that gentlemen not members of the Association were not eligible to serve on its committees. Tabled.

Dr. *Toner*, of the District of Columbia, submitted a tabular statement, giving the representation in the American Medical Association since its formation, from the various societies and institutions, etc., throughout the country entitled to such representation, embracing much valuable and interesting information, which, after being read, was referred for publication.

It was resolved that at the future meetings of the Association a dinner should be given on the third day of the convention at the expense of the members eating the dinner.

Dr. *Mussey*, of Ohio, offered the following:

*Resolved*, That the clause in the by-laws which provides that

every alternate meeting of the Association be held at Washington, be repealed, and that in the future the place of meeting should be determined at each session of the Association.

The resolution was concurred in.

Dr. *Curwen*, of Pennsylvania, then read an interesting report on the treatment of the insane, which was received and referred to the Committee on Publication.

Dr. *White*, of Buffalo, offered a resolution recommending to the several medical schools of the country the establishing of chairs of Psychology, for the treatment of mental diseases. Adopted.

The Committee on Prize Essays submitted a report, which was adopted.

A resolution was offered that a committee be appointed to report what, if any, legislative means could be taken to prevent the spread of epidemic diseases? Adopted.

Dr. *C. C. Cox* inquired if the Committee on Ethics would make any further report on the weighty matters before them.

Dr. *Antisell* called attention to a paragraph from the *Chronicle* of yesterday morning, charging the Committee of Arrangements with certain actions that should be denounced by the Association. He denied the charges and asked the Association to sustain the committee in its actions.

On motion, it was decided to postpone the further consideration of the subject until after the report of the Committee on Ethics had been received.

Dr. *N. S. Davis*, of Illinois, then submitted, on behalf of the majority of the Committee on Ethics, the following

#### REPORT.

It appears that the matters reported to your Committee of Registration, and so much of the action of the majority of same committee as relates to the same subjects, embraces the three following subjects:

First. A charge that the majority of the Registration Committee had refused to register the delegates presenting credentials from several societies, colleges, and hospitals in the District of Columbia which claimed the right to representation.

Second. Direct charges against the Washington Society and the Medical Association of the District of Columbia, accompanied by a protest against the admission of delegates from those bodies.

Third. Direct charges, which had been lodged with the Committee of Registration against the National Medical Association of



the District of Columbia, accompanied by a protest against the registration of delegates from that society, and from such other institutions as were supplied with medical officers who were members of that society.

In regard to the first charge, your committee find on investigation, that the Registration Committee have duly registered all the delegates from all the medical institutions claiming representation in the District of Columbia, in accordance with the usages and by-laws of the Association, except the Medical Society of the Alumni of Georgetown College, the National Medical Society, the Howard Medical College, the Freedmen's Hospital, and the Small-pox Hospital, these being the institutions included in the charges already mentioned in the third specification.

It remains, therefore, only to consider the second and third specifications, and your committee ask leave to report on these separately. In relation to the second we unanimously recommend the following resolutions:

*Resolved*, That the charges offered by Dr. Reyburn, as a minority of the Committee on Registration, against the Medical Society and the Medical Association of the District of Columbia, are not of a nature to require the action of the American Medical Association, the first charge referring to a duty imposed on the society by an act of Congress, and the second referring to a matter which does not come in conflict with any part of the code of ethics.

*Resolved*, That so far as relates to the Medical Society of the Alumni of Georgetown College, it has been shown to us that the society has sixty resident members, and is therefore entitled to six delegates instead of as requested by the committee.

In regard to the third proposition relating to the National Medical Society, Howard University Medical College, the Freedmen's Hospital, and the Small-pox Hospital, we recommend the following:

*Resolved*, That the duties of the Committee of Arrangements, so far as relates to the registration of members, is purely clerical, consisting in the verification of the certificates of delegates and a report on the same. If credentials in proper form are presented from any society or institution professing such views as would place it *prima facie* in the list of institutions enumerated in the constitution of the Association as entitled to representation, but against which charges have been made or protests presented, the names of the delegates presenting such credentials, together with the charges or protests in the possession of the committee, should be represented to the Association for its action.

*Resolved*, That the charges lodged with the Committee of Ar-

rangements against the eligibility of the National Medical Society of the District of Columbia have been so far sustained that we recommend that no member of the society should be received as delegates at the present meeting of this Association.

N. S. DAVIS,  
H. F. ASKEW,  
J. M. KELLER.

Dr. *Alfred Stillé*, of Pennsylvania, then submitted the following as a

#### MINORITY REPORT.

The undersigned, members of the Committee on Ethics, while subscribing to the greater portion of the report of the majority, feel it their duty nevertheless to dissent from the final resolution recommending the exclusion of the members of the National Medical Society of the District of Columbia from the present meeting of this Association; they offer, therefore, in lieu of that resolution the following:

WHEREAS, The institutions excluded from representation by the action of the Committee on Credentials, viz: The National Medical Society, the Howard Medical College, the Freedmen's Hospital, and the Small-pox Hospital, are regularly organized as the constitution of the Association requires; and whereas, the physicians so excluded are qualified practitioners of medicine who have complied with all the conditions of membership imposed by the Association; and whereas, in the judgment of the undersigned no sufficient ground exists for the exclusion of such institutions and physicians from this Association; therefore,

*Resolved*, That the institutions above named are entitled to representation, and that the physicians claiming to represent them, are entitled to seats in the American Medical Association.

ALFRED STILLÉ,  
J. J. WOODWARD.

Motions were made to accept and reject the different reports, when, amid the greatest excitement, the yeas and nays were called for.

Dr. *Howard*, of the District of Columbia, asked who of the District were entitled to vote.

The Chair then decided that those gentlemen were entitled to vote who had been unanimously admitted by the Committee on Ethics.

Dr. *Cox* endeavored to speak, but amid cries of "sit down," was forced to desist.

An appeal was taken from the decision of the Chair, which was not sustained, the vote being 115 for and 90 against.

The secretary began to call the roll upon the question of laying the minority report upon the table about 1.30 and continued until 2 o'clock, when the secretary announced the vote—yeas 107, nays 85. The minority report was accordingly tabled.

The greatest excitement prevailed throughout the calling of the names.

A motion was made to adopt the majority report.

Dr. C. C. Cox, of Maryland, then addressed the Association, protesting against its action in rejecting the minority report, and gave a brief history of the origin of the differences of opinion now existing among the several societies of the city. Dr. Cox, during his address, was frequently called to order.

The question on the adoption of the majority report was then called, but it was thought to be unnecessary, as the rejection of the minority report adopted it.

In the evening the Association visited the Capitol for the purpose of seeing the dome lighted. Association *en masse*, then called upon Mayor Bowen, filling the entire house to such an extent that anything more than a formal reception was impossible. The evening, however, passed off very pleasantly.

#### FOURTH DAY—FRIDAY, MAY 6th.

The Association assembled at 9½ o'clock, Prof. Geo. Mendenhall in the chair, and Dr. W. B. Atkinson secretary.

The Committee on Ethics reported favorably on the credentials of the delegates from the Women's Medical College and Women's Hospital, Philadelphia.

Drs. *Hartshorn*, *Bell*, *Davis*, *Maddux*, and *Cohen* participated in the debate, after which the matter was indefinitely postponed.

Dr. *Palmer*, of Maine, offered a resolution of inquiry as to why the Howard Medical College had been excluded from admission in this Association, stating that the institution had been chartered by special act of Congress, and was recognized all over the country as a first-class college.

A discussion took place on the adoption of the resolution.

Dr. *N. S. Davis*, of Illinois, said if the resolution was withdrawn, he, as chairman of the Committee on Ethics, would give his reasons in writing why the institution was excluded.

The resolution was withdrawn.



Dr. *R. J. O'Sullivan*, of New-York, then offered the following:

WHEREAS, Apothecaries are accustomed to renew medicines prescribed by physicians without due authority from the physician, thereby doing much injury to patients, and by which many lives have been destroyed; and as apothecaries are unwilling to discontinue the practice except by a general action: therefore,

*Resolved*, That this Association take such action as will bring about the discontinuance of the practice.

Referred to a special committee, consisting of Dr. O'Sullivan, Chairman; Garrish, of New York, Moore of Missouri, Thror of Massachusetts, and Charles Woodward, of Ohio.

A protest against the adoption of Dr. Pinkney's report of the Medical Corps of the Navy was submitted, by Dr. *P. S. Wales*, U. S. N., and after some debates was laid on the table, and the whole subject referred to a committee of three, to report at the next meeting of the Association.

The Committee on Ethics made reports on several cases relating to charges against individuals and colleges in the different states, and they were referred to appropriate committees.

Dr. *Hartshorn*, of Philadelphia, offered a resolution that the constitution be so amended as not to exclude women from membership of this Association. Laid on the table.

Dr. *Powell*, of Atlanta, Ga., offered a resolution that the Association do not recognize any college or institution against which charges are pending.

It was opposed by Dr. *Reyburn*, of the District of Columbia, and advocated by Dr. *Powell*, after which it was laid over, under the rules.

Dr. *Lee* offered a paper on insane institutions; which was referred to the Committee on Publication.

A paper on epidemic diseases was read and referred.

A vote of thanks was tendered to Mayor Bowen for entertaining the Association at his residence on Wednesday night.

A motion was made that the next meeting of the Association be held in San Francisco, California.

A resolution declaring Dr. Horace Wells, of Boston, to be the discoverer of anæsthesia, was adopted.

A resolution of thanks was tendered to Dr. Mendenhall for the able manner in which he has presided over the deliberations of the Association.

Dr. *John Sullivan*, of Massachusetts, offered the following:

*Resolved*, That no distinction of race or color shall exclude persons claiming admission to this Association who are duly accredited thereto.

During its reading the speaker was met with a storm of hisses, which compelled him to stop. Cries of "go on," "go on," were heard, and he said he would do so when the serpents became quiet. He then finished its reading, and was allowed to speak seven minutes.

During the delivery of the above speech, great confusion reigned, and had it not been for the persistent efforts of Dr. Yandell, of Louisville, Kentucky, at one time surgeon-in chief of Gen. Kirby Smith's army, Dr. S. would not have been able to have concluded his remarks. During their delivery Dr. Yandell appealed to the sense of the convention to allow him to proceed, stating that he was a Southern representative, but that he desired fair play, and trusted that Dr. Sullivan would be heard.

Upon the conclusion of Dr. Sullivan's remarks, Dr. N. S. Davis, of Chicago, read the following :

#### REPORT OF THE COMMITTEE ON ETHICS.

In reply to the resolutions of the Association calling upon the majority of the Committee on Ethics for the reason why they in their report exclude the delegates from the Medical Department of Howard University, they respectfully state that there is nothing in the report which directly excludes delegates from the said University or any other medical institution in the District of Columbia, except the National Medical Society.

The resolution on this subject, reported by the committee, is in these words :

*Resolved*, That the charges lodged with the Committee of Arrangements against the eligibility of the National Medical Society of the District of Columbia have been so far sustained that we recommend that no members of that society should be received as delegates at the present meeting of the Association.

It will be seen that the only parties excluded from admission as delegates at the present meeting are the members of the National Medical Society. If the Medical Department of Howard University had chosen to send any delegates who are not members of that society there is nothing whatever in the report to prevent them from being received.

In the papers referred to your Committee on Ethics were a list of charges with specifications in the usual form against the regis-

tration of the National Medical Society. These charges may be clearly stated, as follows :

1. That said National Medical Society recognizes and receives as members, medical men who are not licentiates, and who are acting in open violation of sections 3, 4, and 5, of the law of Congress, constituting the charter of the Medical Society of the District of Columbia.

2. That a large part of the members of the National Medical Society are also members of the National Medical Association of the District of Columbia, and are openly and freely violating the rules and ethics of the association to which they have subscribed.

3. That they have both in its capacity as a society, and by its individual members, misrepresented the actions of the Medical Society and the Medical Association of the District of Columbia, and used unfair and dishonorable means to procure the destruction of the same, by inducing Congress to abrogate their charter.

Each and all of these charges were, in the opinion of the majority of your committee, fully proved by the members of the National Medical Society themselves, who appeared voluntarily before your committee as witnesses. Therefore, if we have any regard to the maintenance of the laws of the land or the ethics of our medical organization, the undersigned could not come to any other conclusion than was expressed in the last resolution recommended by the majority of the Committee on Ethics.

At the conclusion of its reading Dr. *Reyburn* rose to reply, when he was called to order as not being a member. He was, however, permitted to speak five minutes. He said he never had violated the code of ethics, and when the colored men applied for admittance to the college to which he belonged, he offered a resolution providing for their admission. He did not think they should be excluded on account of color.

His resolution was not received, and he withdrew from the Society, and was one of the leading members in organizing the National Medical Society. If this was a violation of ethics, then he had violated the code. He was placed as Chairman of the Committee on Credentials last year at New Orleans, and when he was prepared to make his report at this session he was most shamefully treated by the Committee of Arrangements.

Dr. *Antisell* disclaimed the assertion made by Dr. *Reyburn*, that he had been treated shamefully.

Dr. *Loomis*, of the District of Columbia, said he was a member



of the faculty of Medicine of Howard University, and he could see no reason why he was excluded. He then offered a resolution to the effect that members of the Committee on Ethics who signed the majority report be censured for so doing.

The resolution was laid on the table.

Dr. *Johnson*, of the District of Columbia, President of the Medical Society of the District of Columbia, then proceeded to give a detailed history of the difficulties existing in the local societies. He also stated that Dr. D. W. Bliss had violated the rules of ethics by having his name printed on a bill of fare at Willard's Hotel.

Dr. *Bliss* denied its having been placed there with his knowledge.

Drs. *Johnson*, *Busey*, and *Marbury*, sustained the charge by statements.

After which Dr. *Busey* replied to certain statements of Dr. *Johnson*, and read the sixteenth rule of the Code of Ethics, showing that the code had been violated in the attempt to force the colored man upon the society. This was what had caused all the trouble. Dr. *Borrows* had been instrumental in bringing about the color difficulty. He denied that politics was the cause of the difficulty, as had been stated by Dr. *Cox*.

The vote was then taken on Dr. *Sullivan's* resolution, and it was tabled by a vote of 106 yeas to 60 nays.

Dr. *H. R. Storer*, of Boston, offered the following:

That, inasmuch as it has been distinctly stated and proved that the consideration of race and color has had nothing whatever to do with the decision of the question of the reception of the Washington delegates, and inasmuch as charges have been made in open session to-day distinctly attaching the stigma of dishonor to parties implicated, which charges have not been even denied by them, though present, therefore,

*Resolved*, That the report of the majority of the Committee on Ethics be declared as to all intents and purposes unanimously adopted by the Association.

The resolution was adopted by a vote of 112 yeas to 37 nays.

The Association then adjourned *sine die*.

*The Indiana State Medical Society.*

The twentieth annual session convened in the city of Indianapolis, May 17, and continued its sessions two days.

Dr. *George Sutton*, of Aurora, president.

Dr. *G. V. Woolen*, of Indianapolis, secretary.

A large number of permanent members and delegates were present at the opening of the first day's session.

After the usual preliminary business, preparing for work, reports and essays were announced in readiness from Dr. G. W. Means, Dr. G. V. Woolen, Dr. F. J. Van Vorhis, Dr. Hobbs, Dr. S. E. Wright, Dr. Waterman, Dr. Houghton, Dr. Passage, Dr. Kersey.

Dr. *Rooker* offered a resolution authorizing the secretary and publishing committee to procure an appropriate seal for the use of the society.

Dr. *Fletcher* proposed that members in arrears three years after due notification be dropped from the rolls of the society. Adopted.

Notice was taken of the death of Prof. J. S. Bobbs, and a committee was appointed to prepare a memoir of the doctor, to be included in the Transactions of the society.

Dr. *Weist*, of Richmond, read a report in regard to the subject of public charities, and in accordance with his suggestion a committee was appointed to petition the legislature to create such a board.

Dr. *Kersey*, of Richmond, presented a paper from the Wayne Co. Medical Society in regard to the status of surgeons in the navy, and reciting a well known recent case in which a surgeon was court-martialed and reprimanded for refusing to obey the order of his superior officer of the line to strike the name of a seaman from the sick-list.

Dr. *Kersey* moved that medical men be recommended to keep out of the naval service until better treatment be guaranteed. Adopted, and a copy to be sent to Surgeon General and American Medical Association.

## AFTERNOON.

Thanks were adopted to Medical College for the use of their principal lecture room.

Dr. *Comingore* read a paper on pathognomonic signs of nephritis.

Dr. *Means* read a paper on puerperal hemorrhage.

Dr. *Thompson* read a paper against the action of the American

Medical Association on the subject of "specialists" advertising. Laid over for discussion to-morrow. Subsequently referred to Committee on Ethics.

Dr. *Van Vorhis* presented a paper on the psychical influences of the organization of strictures. This was discussed at the night session by several of the members.

#### NIGHT SESSION.

Dr. *J. F. Hibberd* called to the chair, and

The President, Dr. *Sutton*, read his address on man's power over nature; the science of medicine as a means by which he aids and controls the laws of life.

A vote of thanks was passed for the address.

#### SECOND DAY.

Dr. *Hibberd* moved that the constitution and by-laws, with their various amendments incorporated, be published with the Transactions of this year. Adopted.

Dr. *Hibberd* also moved an amendment to by-laws to the effect that no person be allowed to participate in the proceedings of this society until he give his name and two dollars to the secretary.

Drs. *Hibberd*, *Todd* and *Parvin*, were appointed a committee to report on the subject of the resolutions of American Medical Association, at the New Orleans meeting of 1869, in regard to a board of examiners to license practitioners.

Dr. *G. V. Woolen* read a paper on syphilis.

Dr. *S. S. Gray* was introduced as a delegate from the Ohio State Medical Society. He was greeted with applause.

Dr. *Hobbs* read a paper on a case of syphilitic caries of the skull.

The committee on nominations reported the following as officers for 1870-71: President, R. N. Todd; Vice-President, J. N. Rosenthal; Secretary, G. V. Woolen; Assistant Secretary, W. J. Elston; Treasurer, J. H. Woodburn; Librarian, A. W. Davis.

Report adopted.

Dr. *Passage* read a paper on reduction of dislocated hip after eleven days' standing.

Dr. *Houghton* also read a paper on dislocated hip, illustrated by specimens and blackboard drawings.



## AFTERNOON.

Dr. *Hibbard* in the chair.

Dr. *C. E. Wright* read a paper on purulent aural catarrh.

Dr. *Rooker* moved that the society recommend the profession of the state to patronize the *Indiana Medical Journal*.

Dr. *Mendenhall* read a paper on the utility of ergot in facilitating labor.

Dr. *George Sutton* was requested to prepare a paper on milk sickness; also Dr. J. H. Stewart to prepare biographical sketches of physicians. Dr. *Mears* to report on the changes of types in diseases in this state.

A number of additional permanent members and delegates were received.

Dr. *J. M. Kitchen* proposed to furnish a complete file of Transactions of this state society for the library of the society. The offer was accepted, and a vote of thanks adopted.

Dr. *Waterman* read a paper on relapsing fevers.

The following were appointed on the Standing Committees: Prize Essays, Dr. Parvin, Chairman; Ethics, Dr. T. B. Harvey, Chairman; Arrangements, Dr. Waterman, Chairman; Finance, Dr. Lockhart, Chairman; Publication, Dr. G. V. Woolen.

A number of gentlemen were announced to prepare papers for the next meeting.

After the customary vote of thanks to the officers, and a special vote to the president, the society adjourned to meet in Indianapolis on the third Tuesday in June, 1871.

*The Central Ohio Medical Society*

Held its fifth regular session in the Opera House, Delaware, Ohio, April 21, 1870. Dr. C. Landon, the president, taking the chair, called the house to order, and the minutes of the previous meeting being called for was read and adopted. The Committee on Admissions recommended Drs. G. H. Holland, J. Merriman, C. Welch, J. McKann, and Neil, who were admitted members of the society.

Dr. *Hyatt* read an essay on the alcoholic treatment of disease, which was discussed by Drs. Blymer, Welch, McKann, Landon, Beverley, Anchus, Golden, Besse, and others, at some length. The paper was sustained and recommended for publication.

Dr. *Hyatt* reported his success in the treatment of acute insanity

and epilepsy with hydrate of chloral; and Dr. Little had used it successfully in neuralgia.

Dr. *Anchus* read a paper on ovaritis, and reported a case in which an ovarian abscess discharged itself spontaneously through the abdominal parietes. The subject of ovarian tumors was discussed by Drs. Little, Merriman, Hyatt, Williams, and others.

The president appointed Drs. Hyatt, Page, and Anchus essayists for the next regular meeting.

Executive Committee: Anchus, Beverly, Bickett, and Johnson.

The next regular session of the society will be in Westerville, first Thursday in July next, at which time the election of officers for the ensuing year will take place.

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***Gelseminic Acid—Gelseminia.*** Prof. Wormley, of the Starling Medical College, offers the above names to designate a new organic acid and an alkaloid which he recently discovered to reside in the *gelsemium sempervirens*. An intensely active poison has long been suspected in the gelsemium, but it is believed that the alkaloid itself has for the first time been isolated in the experiments of Prof. W. Gelseminia or gelsemia, as the distinguished toxicologist proposes to call the substance, is a colorless, odorless solid, of intensely bitter taste, and is a powerful poison: one-eighth of a grain given hypodermically to a cat having caused death in ninety minutes. It can now be understood how fatal consequences have sometimes followed the administration of the fluid extract or concentrated tincture of the gelsemium.—*American Journal of Pharmacy*.

***Treatment of Croup.***—Dr. Fabius, of Amsterdam, employs neither antimony, calomel, nor blood-letting in croup. The chief object is to avoid debilitating remedies as far as possible. Ipecac is as good an emetic as antimony; other purges are equally efficacious with calomel; bleedings are unnecessary. An emetic, a warm poultice to the neck, and a quantity of warm steam in the room, are his “abortive” measures.

## Correspondence.

## LETTER FROM LOOKOUT MOUNTAIN.

LOOKOUT MOUNTAIN, *May*, 1870.

MESSRS. EDITORS :—Cool, calm, collected, I look down upon the “outward and visible signs” of the workings of men’s minds, and would fain communicate to you, however feebly, the impression made upon me by the late *stir* in the elements of the orthodox medical fraternity!

Sudden deaths are not uncommon, and almost invariably produce astonishment, in a circle large or small, according to circumstances. They are attributed to various causes, and not unfrequently the Great Being is directly and emphatically blamed for the event. Lately, however, a death took place unexpectedly, suddenly, without *His* agency having been acknowledged or ignored, but which gave rise to some shedding of ink and evolving of gas, with the design of proving on the one hand that the deceased came to his untimely end “for lack of the action of the heart,” and on the other “from want of breath.” So gigantic in importance did this question seem to one of the disputants—the one who insisted the patient died from want of breath—and so great the outside pressure, that irrefragable proof should be forthcoming to relieve the mind of an uncomfortable weight of suspicion that said patient had his “golden bowl” broken by some other instrumentality, that a document containing a carefully prepared history of the case, an elaborate argument consisting mainly of the opinions of celebrated physicians of the “past, present and future” was presented to our Medical Sanhedrim, thence conveyed by the Press to a favored few, and then by accident found its way to the columns of a daily paper, that the multitude might not feel slighted, and that *all* should experience a conviction that what he originally asserted had been demonstrated to a—*dot*! While the wings of the Press were performing their functions the Med. Sandedrim was not *mum*! Bût, as Truth is the



corner-stone of that argus-eyed institution, it is my imperative duty to say that the effect of the "cool, calm, and collected" reading of the aforesaid document was stunning!—so stunning that every member was as dumb as a "sheep before her shearers." Nor was the aponia relieved until the evening of the 7th day. An evening, ever to be remembered for the emitting of gas, good, bad and indifferent!

The discussion continued week after week until all but two of the members subsided, and solemn stillness reigned whilst the "polemic art" was most skillfully and artistically illustrated by the efforts of the pair to convince the wearied and jaded and more or less obfuscated minds of the learned body that nothing could be plainer to men of erudition (of such is our medical institution) than that, "in the case before us," the cessation of breathing, as quick as a flash; was entirely owing to an obstacle which, at an unseasonable hour, and in a very narrow space, presented itself to the occlusion of the conduit upon the more or less patent condition of which we all depend for breath. So spoke one of the pair. The other "could not see it." He insisted upon it that the action or non-action of the heart had a great deal to do with these sudden deaths. And in a very calm, cool and collected manner urged with logical acumen that the position he had taken was the only 'tenable' one. "The sentinel on duty had gone to sleep, whereby the usual and sufficient amount of nervous fluid had not reached this important organ—the heart—and, consequently, its wheels of motion stopped, and life became extinct. Breathing had nothing whatever to do with the catastrophe!" After these speeches, of which I have given you the quintessence only, the combatants departed, and have not since been seen in the Academic hall! Exhausted, no doubt, by their severe and arduous labors. With their colleagues *mum* has been the word from that time to this on that engrossing and time-consuming subject. It would seem that there has been no victor, and consequently no crown of laurel graces the brow of the one or of the other! It may be that a consciousness of having defended the truth is their sweet and ample reward. At a more convenient season you *shall* hear again from

Truly yours,

OBSERVER.

CINCINNATI, June, 1870.

E. B. STEVENS, M. D., EDITOR: "The mountain hath labored and brought forth" a—muss! I refer, as with your clear-sightedness, you have already seen, to the late session of the American Medical Association in Washington, D. C. Science hung her harp upon the willow and went into mourning on account of the development of the combative element which enters more or less into the "make-up" of the disciples of Æsculapius, *preponderating* in that august body. The ship would not mind her helm in the tempestuous ocean of strife in which she was nearly engulfed, and would have foundered but for the self-possession, firmness and wisdom of the captain and his chief officers. The origin of this turbulence was a tempest in a teapot, and might have been avoided by keeping the comparatively insignificant vessel at its moorings, where it might have harmlessly raged—to exhaustion! However the Association has learned a lesson which may be profitable in future sessions. You and I—and several others—were not at the meeting. Among those at home one or more developed into *detractors*, a fraction of a class who, undoubtedly, were in the eye of the poet when he wrote:

"Detraction's a bold monster, and fears not  
To wound the fame of princes," etc., etc.

The assassin under covert plunges a dagger into your body; the wound may be slight or mortal; the intent deadly! An adroit thief may steal your purse in open day! Both are *detractors*! monsters! and bold, you may say! But in comparison with those who, under the cover of "anonymous," attempt to wound the fame or destroy the reputation of a brother, bold monsters, are too mild terms. They are *damnable*, and "should go down to the vile dust, from whence they sprung, unwept, unhonored," and *well hung*. Such may be their fate. The "progress" they are making toward that end, manifests that "*justice*" is not asleep. Let us leave them wriggling in their dark, sinuous ways—afraid of the light, and with pity look upon *him*, who, under a flimsy banner, with ignorance, vanity, and self-conceit inscribed, makes a stupid effort to look the sun out of countenance, or stretch himself to the dimensions of a well formed giant. Let *him* be blinded, let *him* burst! Another will be added to the list of victims, who, from their folly, have been consigned to darkness, or transposed

from the living to the dead, that mother earth might be enriched by their decomposition, thus compensating for their barrenness of good, while living!

"How do I laugh, when men of narrow minds,  
Whom folly guides, and prejudice controls;  
Who, one dull drowsy track of business trod,  
Worship their mammon, and neglect their God;  
Who, breathing by one musty set of rules,  
Dote from the birth, and are by system fools;  
Who, formed to dullness from their very youth,  
Lies of the day prefer to gospel truth."

J. F. W.

MECHANICSBURG, OHIO, June 13, 1870.

E. B. STEVENS, M. D. *Dear Sir:* I have just noticed in the *Lancet and Observer* for this month, an inquiry as to how and where to procure reports of inebriate asylums, hence in the interest of a class of patients for whom we should have the greatest sympathy, I refer you to the following institutions, namely, New York State Inebriate Asylum, at Binghamton, N. Y.; the Washingtonian Home, in Boston, Mass.; the Inebriate Asylum at Baltimore, Md., and the Greenwood Institute, at Greenwood, Mass. Address: Superintendent, etc., etc. The two first mentioned are the older institutions, and it is claimed that they have reclaimed many from both alcohol and opium habits.

There may be others, and believing as I do, that inebriety is a disease, and that the asylum is the place to treat it, I hope that, if need be, there will be more such humane institutions. I think medical gentlemen should take more interest in the commiserant dipsomanie, and be more diligent in staying the malignant disorder.

Respectfully yours,

JOHN H. CLARK, M. D.



## Editorial.

**Vaccine Disease.** We see a paragraph going the rounds of the papers that Dr. Martin, of Boston, has applied to Secretary Boutwell and received privilege to import three vaccine heifers from France free of duty. Thus, just as the *animal vaccine* idea is about exploded in France, it seems we are to have a furor in this country, and we suppose our "Hub" friends will flock to Dr. Martin's heifers in crowds, and fill his pockets with handsome gains! Opportune to this matter we quote in our present number, a portion of the excellent report of Dr. Davis, made to our State Society. The whole report is an excellent one. In addition to the section given in the original part of this number, we also append his general conclusions, and the resolutions presented to the Society. The whole report embraces the following sections:

1. The small-pox epidemic of 1868-69 in the United States.
2. The alleged degeneration of human vaccine lymph.
3. Animal vaccine.
4. Vaccino-syphilis; with
5. An *appendix*, containing letters from Edward C. Seaton, M. D., Medical Inspector of the Privy Council, England; J. K. Barnes, M. D., Surgeon General U. S. Army, and Wm. Clendenin, M. D., Health Officer of Cincinnati.

Its conclusion on these several points are as follows:

1. When care is exercised in the selection of subjects, there is no evidence that vaccine virus has lost its activity or prophylactic effects by continued human transmission; on the contrary, the Jennerian lymph, now in use in the British vaccine establishments and the "Findel Anstadt," Vienna, demonstrates that its virtues are retained. The former was taken from the cow over fifty years ago, the latter seventy.

2. The evidence of the profession of England, Germany, and America is to the effect that lymph direct from the cow is not so certain to infect, is much more violent when it does succeed, and has no more protective power than human lymph. In France where animal vaccine has been in general use for the past six

years, it has not given any greater protection against small-pox. On the contrary, it seems to have given less, and the French are now returning to the practice of human vaccination.

3. The transmission of constitutional affections, particularly syphilis, by means of the vaccine virus (a) is opposed by statistics, which report a reduction in constitutional affections, and an extension of the average duration of life, since the introduction of vaccination.

(b) It is opposed by the experience of the greatest vaccinators and syphilographers.

(c) It is opposed by pathology.

(d) It is opposed by the *experimentum crucis*, the use of lymph from the arm of a syphilitic patient.

4. A large proportion of the alleged cases of vaccinal syphilis are based on insufficient or defective evidence; the remainder may be reasonably accounted for, without compromising the vaccine, on the grounds

(a) Of the influence of prevailing diseases.

(b) A cachectic diathesis, and

(c) Latent constitutional syphilis.

He concludes with the following statement and resolutions:

England has demonstrated that it is possible to exclude small-pox from her domains by legislative enactment. Would it not be a high honor for the Ohio State Medical Society to initiate a movement which might ultimate in placing America in the front rank with England? Great reforms move slowly, but a combined and persistent movement of the disciples of Jenner would sooner or later accomplish it. In furtherance of this object I would recommend the adoption of the following resolutions:

*Resolved*, That the Ohio State Medical Society appoint a committee to consist of five members, and one corresponding member from each county in the state, to propose and present a memorial to the Ohio Legislature, praying for the enactment of a law which will require all pupils of the public schools, and other educational institutions, supported in whole or part by state or county tax, and all inmates of asylums, hospitals, reform and correctional schools, work-houses, jails, penitentiaries, etc., supported at public expense, to be vaccinated upon admission to the several establishments, unless satisfactory evidence is furnished to a competent inspecting physician that the parties are fully protected by a previous vaccination.

*Resolved*, That it be made the duty of boards of health, where they exist, and county commissioners, where they do not,

to appoint a qualified medical officer, who shall semi-annually inspect the pupils of public and other state schools, and furnish a certificate of vaccination to those who are fully protected, and gratuitously vaccinate those who are not; and no pupil shall be allowed to continue in said schools who has not received a certificate of vaccination.

The several boards having control of the state or county charitable, reformatory or correctional institutions, shall appoint each a qualified medical officer, who shall vaccinate all the inmates of said institutions, without respect to any previous vaccination; and all persons admitted thereafter shall be vaccinated immediately upon their admission, and such persons as are confined for a term of years or for life shall be revaccinated every five years.

*Resolved*, Further, that the Legislature be petitioned by the same committee to pass a law requiring all cities of the first class to establish and support vaccine establishments for the purpose of cultivating and having constantly on hand reliable vaccine virus.

*Resolved*, Further, that the Legislature be petitioned to make it a penal offense for any persons but regularly educated physicians to perform the operation of vaccination.

*The Ohio State Medical Society* met at Cleveland in accordance with adjournment, and published announcements. The attendance was good, quite as large a number being present as usual, perhaps rather more. Dr. Herrick, of Cleveland, did everything in his power to make things pleasant; and in the main, the meeting *was* pleasant, but we saw but little of the Cleveland doctors. Dr. Kirtland was busy, we presume, with bees and cherries—at any rate, the Society which has heretofore been proud to do him honor, had not the pleasure of seeing his face, or making to him their salutations. Otherwise, as we have said, the meeting was pleasant. The lake trip was abridged on account of the weather, but there was a pleasant trip to Newburg.

The “*silver wedding*” exercises went off in good style. Dr. Stevens made a review of medicine in Ohio, that was quite acceptable. The poem of Dr. Brown was suited to the occasion, as all will agree; then followed a brief, spicy, half hour of small talk, and the valedictory of the president, Dr. Smith, was fully up to all that could or should be expected of such an occasion.

Next year, 1871, the State Society meets in Cincinnati. We hope and believe the Executive Committee will make it an occasion long to be remembered by the medical profession of Ohio. The Kentucky State Medical Society will convene at the same time at Covington,



and we trust occasion will be afforded for full interchange of civilities and courtesies.

Dr. Reamy is elected president for the ensuing year, and the Society showed its appreciation of good works by continuing Dr. Hall secretary, by acclamation. We regret that we have failed to receive the proceedings in time for publication in the present number.

*The late Dr. L. C. Rives.* Doctor Landon C. Rives, whose recent death in this city, at the advanced age of eighty years, is already known, was one of the great professional men of his time. He came from Philadelphia, where he studied medicine, to this city in 1830, and practiced up to 1857, when he retired from active life.

He was one of the faculty in the Cincinnati College with Drs. Drake, Gross, Parker, Rogers, Harrison, and McDowell, the most able and reputable association of medical professors the West ever had, and he stood with them and maintained his position with uniform honor and ability.

Of that faculty there are only two now living, Drs. Gross and Parker. Dr. Rives subsequently occupied a chair in the Medical College of Ohio, and was distinguished for a large sympathy with the young men in the profession of medicine.

He was social, genial in disposition, devoted to his profession, and left no stain upon the record of his long and honorable career as a physician.

*Insane Assassins.* The ground upon which McFarland was recently acquitted of the murder of Richardson makes it proper matter of comment in a medical journal. We express no opinion as to any of the merits or demerits of the killing itself—these will strike different persons something according to their moral sense; but as to the plea of insanity we have a word to say. Does anybody entertain the remotest idea that McFarland was crazy? Does not every reasonably sane person know perfectly well, that it was simply a part of the clap-trap of legal subterfuge to throw a cloud of smoke about the case and make a pretext for acquittal. There has been no effort to place the assassin under the usual surveillance or treatment of an insane man; nothing of the kind is proposed or expected. The whole thing is perfectly transparent. What are the inferences then? The judge should have overruled the jury as giving a verdict contrary to law and testi-

mony ; or the jury should have given a verdict of guilty—but if they felt there were extenuating circumstances in the domestic relations of any of the parties, then recommend to mercy. How stands the case now ? With this tendency of public or social sentiment, we shall in all these matters rapidly come to disregard all forms of law, and men will come to execute for themselves what each deems justice. Are we prepared to retrograde toward this sort of barbarism ? Now, if these are the legal and social aspects of this remarkable case, what are we to say of its medico-legal feature ! Has it come to this sad state of professional demoralization that a brother in high standing will or can be induced to lend his repute to aid such trickery ? Every body *knows* that this pretext of insanity was a legal straw and sham, and yet Dr. Hammond deliberately comes into court and *swears* that the point is well taken ! Is Dr. Hammond himself sane ? For the sake of our professional good name we shall try to doubt it.

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***Our Literary Exchanges.*** As this is about the time when many of the leading periodicals of the country enter upon a new volume, it is a good time to begin subscriptions. Those on our table are too well known to need more than a brief recapitulation :

***Harper's Monthly Magazine,*** dates its volumes from December and June of each year. We know of nothing more substantially desirable for general family reading. \$4 a year.

***The Atlantic—Every Saturday,*** and ***Our Young Folks,*** are the well-known periodicals by Fields, Osgood & Co. Boston. Each fills its peculiar place in American letters with remarkable completeness.

***Godey's Lady's Book*** enters on a new volume with July ; it has catered to the tastes and culture of women for such an indefinite period as to become among the indispensables. Price \$3 a year.

The ***Repository*** and ***Golden Hours*** are the charming serials issued from our Methodist Book Concern, and are appreciated wherever pure, elevating literature, are sought. For subscriptions call on any Methodist clergyman.

*The Indiana Journal of Medicine* has reached our sanctum, and we are gratified to know that we were not intentionally slighted. It is a neat little monthly of 32 pages, edited by Drs. T. M. Stevens, W. B. Fletcher, and Guido Bell. Price \$1.50 a year.

*The Journal of Cutaneous Medicine*, and Diseases of the Skin. Edited by Dr. H. S. Pardon. Quarterly—London, is the title of an excellent journal that has come to us for exchange. The present number begins a new volume.

*New Books* and *Pamphlets* have accumulated on our table, the notice of which we regret to be still obliged to defer on account of the press of matter that we are disposing of. We hope to make a better variety after this.

*Crowther*, the well-known druggist at the old stand, Fifth and Main, has retired, selling out his stand and stock to Schultz & Negley. Physicians will do well to look in.

*Bills* are enclosed in the present number against all subscribers supposed to be in *arrears*. Mistakes will be cheerfully corrected, and a prompt and general response of dues will make glad the heart of the Publisher, more than words can tell.

*Wanted*—To buy a practice, or form a partnership with some physician about to retire. Address this office.

*Married.* WALTON—YOUNG.—Thursday, June 16th, at the residence of the bride's mother in Pittsburgh, Dr. GEO. E. WALTON, of Cincinnati, and Miss MARION YOUNG.

WRIGHT—CADY.—On the 11th day of May, 1870, by the Rev. P. K. Cady, D. D., assisted by the Rev. Wm. Allen Fiske, Mr. CHARLES O. WRIGHT, M. D. and EVA, daughter of the late D. K. Cady.



## Obituary Notices.

Death has been quite busy of late, cutting down eminent men among us with an unsparing hand. At the head of the sad list we have to make the painful announcement of the death of

*Sir James Y. Simpson*, for thirty years past Prof. of Obstetrics in the University of Edinburg, and though so widely known, and so justly celebrated throughout the world, his death takes place in the full prime of life, being only fifty-nine years of age. We shall endeavor to collect a fuller notice hereafter.

*Dr. J. S. Bobbs*, of Indianapolis, recently deceased in that city. Dr. Bobbs has been for many years a prominent practitioner and Professor of Surgery in the new college. We have received resolutions appropriate to the death and character of Prof. Bobbs, from the Jay county society, which we are sorry to lay over. The State society, also, took proper notice and arranged for a suitable sketch to be incorporated in the transactions.

*Dr. Cecil St. C. Hall* died at the residence of his father, Dr. C. Hall, of Burlington, Ohio, on Saturday the 7th of May, 1870. He was born at Burlington, Ohio, on the 28th day of October, 1845. He studied medicine with his father, and graduated at the Bellevue Hospital Medical College, New York city, in the spring of 1869. He entered upon the practice of the profession of his choice, at Ceredo, West Virginia, and during his short stay there made many warm friends, and displayed medical abilities of the first order. Early in the winter, his failing health compelled him to relinquish his practice, and return to his father's house, where his brief career soon came to a close. He was an only son.

*Dr. Daniel Tilden*. This veteran pioneer in Ohio medicine, died at his residence in Sandusky, May 8, aged 82. He was in active practice fifty-seven years. He was learned and skillful in his profession, and for his many charities, together with his social virtues, he was beloved by all who knew him.

*Dr. Landon C. Rives* died in Cincinnati, Friday, June 3, in the 80th year of his age.

*Mrs. A. E. McFarland*, wife of Dr. J. A. McFarland, in Tiffin, Ohio, on Monday evening, May 30, 1870.

“Go! fair example of untainted youth,  
Of modest wisdom and pacific truth:  
Compos'd in sufferings, and in joy sedate,  
Good, without noise; without pretension, great;  
Just to thy word, in every thought sincere,  
Who knew no wish but what the world might hear.  
Of softest manners, unaffected mind,  
Lover of peace, and friend of human kind!  
Go, live! for Heaven's eternal year is thine,  
Go, and exalt thy moral to divine—  
Go, then, where only bliss sincere is known!  
Go, where to love and to enjoy are one!  
Yet take these tears, mortality's relief,  
And till we share your joys, forgive our grief;  
These little rites, a line, a verse receive,  
'Tis all a neighbor, all a friend can give!”

[O'C—r.

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## Reviews and Notices.

*A Hand-Book of Operative Surgery.* By JOHN H. PACKARD, M. D., one of the Surgeons to the Episcopal Hospital, Philadelphia.

In the language of the author's preface, this is “intended to serve as a hand-book, in which the practitioner, whether of recent or of long standing, may find clear and succinct directions for whatever operation he may be called upon, in the ordinary course of his duties, to perform.” An examination of this handsome work satisfies us that the intentions, thus announced, are very satisfactorily and fully carried out. The book contains two-thirds of the steel plates which illustrate the works of Prof. H. H. Smith, with some hundred and forty good wood-cuts in addition. These plates are but little inferior to the fine French engravings in Ber-

nard and Huette's work on Operative Surgery; and the descriptive text we consider decidedly superior to that of the work just named. The best illustrations, however, are but imperfect delineations of anatomical parts, and are sometimes actually deceptive. As an illustration, from the book under notice, may be mentioned the plate descriptive of ligature of the iliac arteries; in which those vessels are made to appear at quite an insignificant depth beneath the abdominal walls. Another decided recommendation which Dr. Packard's book is entitled to, is the very moderate price at which it is offered; and which puts it within the reach of all; whereas, the other works mentioned are both rather expensive.

K.

For sale by Robert Clarke & Co. Price \$5.

*A Practical Treatise* on the diagnosis, pathology, and treatment of Diseases of the Heart. By AUSTIN FLINT, M. D., Prof. of Principles and Practice of Medicine, etc., in the Bellevue Hospital Medical College. Second edition, thoroughly revised and enlarged. Philadelphia: Henry C. Lea, 1870.

When Prof. Flint gave the profession the first edition of his excellent work on Diseases of the Heart—ten years ago—we thought it worthy of careful attention and review. We take up this new edition, issued after so long a time, with very great pleasure. His preface is very brief; in it he simply tells us that he has endeavored to incorporate the results of the study of diseases of the heart during the ten years that have elapsed, and much of the basis of the revision consists in an analysis of about four hundred and fifty cases recorded by him during that period.

It would scarcely be desirable to give an analysis of the book, more than to say the several chapters minutely and carefully discuss the important heart affections we are called upon to treat, or diagnose. Prof. Flint is now regarded as one of the leading authorities in this department of medicine, and we are sure our readers will be glad to place this work in their library for study and reference. For sale by Robert Clarke & Co.

*The Indigestions:* or Diseases of the Digestive Organs, functionally treated. By THOMAS KING CHAMBERS, Honorary Physician to H. R. H., the Prince of Wales, etc., etc., etc. Third American edition revised. Philadelphia: Henry C. Lea, 1870. This book on the Indigestions, is a third edition of a work pret-



ty well known to the profession, and where known, regarded with such favor as to render it scarce necessary to more than announce this new edition, in which the author tells us he has rearranged and rewritten much of the matter. To such of our readers as are not familiar with the work, it may be proper to state that it is essentially a clinical book—consisting of a large number of cases, illustrating various forms of indigestion, embracing flatulence, diarrhœa, vomiting, constipation, etc., together with clinical comments. Dr. Chambers is a very pleasing writer, as well as instructive and suggestive. It is pleasant to note that the MS. of the present edition is specially prepared for American publication, the last English edition not being as yet exhausted. For sale by Robert Clarke & Co. Price \$3.

*A Manual of Clinical Medicine* and Physical Diagnosis.

By THOMAS HAWKES TANNER, M. D., F. L. S., etc., Third American from the Second English edition. Revised and enlarged, by Tilbury Fox, M. D., London. Philadelphia: Henry C. Lea, 1870.

Dr. Tanner's manual is chiefly intended for the benefit of the student just beginning to classify and utilize his hospital observations, nevertheless the practitioner will find it a useful guide in many of the embarrassing questions that come up in bedside inquiry. While this little volume gives a systematic outline of disease in general, and the modes of determining the diagnosis, it also embraces an account of the clinical examinations of persons for life assurance, the clinical use of the laryngoscope, thermometer, ophthalmoscope, etc. There is a section on chloroform—a chapter on feigned diseases—with other important matters in brief and accessible compass. For sale by Robert Clarke & Co. Price \$1.50.

*A Practical Guide to the Study of Diseases of the Eye.*

By HENRY W. WILLIAMS, M. D., Ophthalmic Surgeon to the City Hospital, Boston, etc., etc. Third edition, revised and enlarged. Boston: Fields, Osgood & Co., 1869.

It is something of a compliment to Dr. Williams that a fresh edition of his little book is called for so soon. It shows that the profession interested in the practice of this specialty appreciate the author as reliable. Especially does the compliment have force in view of the fact that so many excellent manuals of a sim-

ilar character are also before the profession. It is less than two years since the publication of the second edition, we can, therefore, scarcely expect any material addition to this issue; such we find to be the case, but our readers will find it brings up the subject carefully to the present date. For sale by Robert Clarke & Co. Price \$3.

***The Preventive Obstacle***, or Conjugal Onanism. 'By L. F. E. BERGERET, Physician in Chief of the Arbois Hospital (Jura). New York: Turner & Mignard, 1870.

This is rather a sensational little book, and for the matters treated is probably as free from indelicacy as can reasonably be expected. And yet we do not regard it as of any utility, moral or scientific. It proposes to exhibit the dangers and inconveniences, to individuals, families, and society in general, of what the author terms "frauds in the accomplishment of the generative functions." By frauds the author means solitary vice, imperfect sexual intercourse, the use of the condom, etc., to prevent conception, and all the various artifices which are employed for that purpose; he also includes sexual intercourse after menopause, and during the period of pregnancy. He also alludes to certain disgusting practices that for the sake of human nature we would fain believe are known even to but few.

A large number of cases are given; some of them appear to confirm views heretofore entertained on the subject of the dangerous effects of some of these irregular practices; none of them, as we see, add force to old views or establish new points; many of them are irrelevant or prove too much. Quite a number of the cases are certainly *non sequiturs*. Take it in all we think the book had better be handed over to the collections of Paul de Kock.

***The Medical Adviser***: A full and plain Treatise on the Theory and Practice of Medicine, especially adapted to family use. By RESIN THOMPSON, M. D., etc. Cincinnati: National Publishing Company. 1870.

This, probably, is quite as good as any of the books of its class. Whatever information is imparted is in the main correct; that is, there is no specious "root and yarb" nonsense to catch gulls. But we regard all this effort to enable men and women to be their own doctors on such short notice, as exceedingly mischievous. We suppose Dr. Thompson or his publishers—our worthy friends

Jones—would themselves scarcely be willing to trust *their* lives in the hands of any doctor whose whole learning consisted in the careful study of the *Adviser*. In medicine, most certainly, a little learning is a dangerous thing. The greatest nuisance any man ever treats professionally, is the chap, male or female, who has a slight smattering of medicine. So we say, in our opinion all such books are exceedingly mischievous in their tendency and influences.

***Anatomy: Descriptive and Surgical.*** By HENRY GRAY, F. R. S. etc. A new American from the fifth and enlarged English edition: with four hundred and sixty-two engravings on wood. Philadelphia: Henry C. Lea. 1870.

From time to time, as successive editions have appeared, we have had great pleasure in expressing the general judgment of the wonderful excellence of Gray's *Anatomy*. "In this edition the plan of the work has been so far altered that the portion on General Anatomy, which was previously scattered throughout the book, has been collected into an introductory chapter, and rewritten, so as to furnish the student with a very succinct, but it is hoped, sufficient introduction to the study of Microscopic Anatomy." Some other additions and improvements are observed—some additional drawings—all intended to make the work both complete and up to the present. For sale by Robert Clarke & Co. Price, in sheep, \$7.

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THE CINCINNATI

# LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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## Original Communications.

### *Art. I.—Exsection of the Ulna.*

By C. S. MUSCROFT, M. D., Surgeon to St. Mary's Hospital, Cincinnati, O.

M. Velpeau in his *New Elements of Surgery*, by Geo. C. Blackman, M. D., Cincinnati, says, "when the body of the bones of the forearm is carious, or necrosed, or degenerated, it may seem impossible to cure the disease without amputation. I have to reproach myself with having amputated the arm of a man whose forearm swollen and perforated with fistulous passages for many years, had nevertheless for its fundamental lesion, no other than fragments of necrosed bone, which were completely isolated in the center of the ulna, and which it might have been *possible* to have removed by exsection. The same thing happened to me with a scirrhus affection, which was situated in the body of the radius, and which at the present day probably I would have destroyed, while preserving the patient his hand. He also makes the following statements as regards the removal of the ulna.

Scultetus in order to remove an invaginated necrosis of the ulna, made an incision from the carpus to the elbow, and Pezoldi relates that Fr. C. D'Armbruste had successfully extracted twenty portions of this bone from a student affected with spinal ventosa \* \* \* \* ; and M. Baudens (*Gaz. Med.*, 1838, p. 415), in a gunshot wound, has removed four inches of this bone. It appears also that the middle portion of the ulna had already been exsected during the last century by a surgeon who was an acquaintance of Orred (*Bull. des Sc. Med. de Bologne; Journ. des Connaiss. Med.*, 1834, t. 11, p. 201). A soldier who had lost a considerable portion of the ulna, and whose case was mentioned by Dupuytren to M. Champon (*These* No. 11, Paris, 1815, p. 57), was not maimed by it; and the exsection of this bone appears also to have been performed by M. Withusen (*Jæger, op. cit.*, p. 20), and by M. Werr (communicated by M. Sprengler, in 1838)."

These are the only cases of partial or entire exsections of the ulna or radius mentioned by this distinguished surgeon in his great work above named.

Prof. S. D. Gross of Philadelphia, in his *System of Surgery*, etc., mentions the following cases of exsection of bones of the forearm: "A case of excision of both radius and ulna occurred in 1853, in the practice of Dr. Compton of New Orleans. The operation was performed on account of a compound comminuted fracture, two months after the accident, both pieces being removed with the exception of the inferior extremity of the radius. The greater portion of the periosteum which had been detached during the progress of the inflammation, was left in the wound. The patient, a boy, aged fifteen years, made an excellent recovery, having a very good use of the hand. The forearm was three inches shorter than natural, and flexed at a right angle with the humerus.

"Dr. Robert B. Butt, of Virginia, exsected in 1825, the lower two-thirds of the ulna of the left side, in a man twenty-five years old, who several years previously, had received a punctured wound in the wrist joint, causing violent inflammation of the whole limb, as far as the elbow, and ultimately terminating in hypertrophy and caries of the ulna, with immense thickening of the periosteum. Three months after the operation, the man had so far recovered as to be able to pursue his occupation of a housejoiner, flexion, extension, and rotation of the joints being as free and uninterrupted as they had ever been. In 1853, Dr. Carnochan performed a similar operation, taking out the entire ulna, which

as in the case of Dr. Butt, was excessively enlarged from one extremity to the other, measuring at the base of the coronoid process, five inches and a half in circumference, and weighing nearly eight ounces. His patient, a man thirty years of age, was of a strumous habit, and the disease was supposed to have been occasioned by a sprain of the arm in splitting wood with a heavy ax. No untoward symptoms occurred during the after treatment; very little deformity was perceptible when the wound was healed; and the functions of the hand and forearm were preserved in a remarkable degree. Mr. Jones of Jersey, has also removed the whole ulna. The entire *radius* was exsected by Dr. Carnochan in 1854, on account of caries and hypertrophy, and eburnation caused by a severe blow upon the upper part of the forearm, the patient, a man aged twenty, recovering with such an excellent use of the limb as to be able to write with ease and rapidity. When last seen, six years after the operation, the parts remained perfectly sound, but the hand was not quite in its natural axis, as it inclined a little outward, while the styloid process of the ulna formed an abnormal prominence on the inside of the wrist. The bone was exsected from joint to joint. An operation of a similar kind with an equally fortunate result, was performed in 1859, by Prof. Choppin, of New Orleans, upon a boy, aged fourteen years. In this case, however, the inferior articular extremity of the bone was retained as it was found free from disease.

During the session of 1857, I excised at the clinic of the Jefferson Medical College, somewhat more than the upper half of the bone along with the outer condyle of the humerus, for scrofulous disease of several years standing, the patient being a young Irishman in dilapidated health. He recovered well from the operation, but of the ultimate result I am unable to give any account, as the case was soon after lost sight of. The appearance of the limb prior to the operation, is exhibited on page 100.

"Mr. Erichsen states that he has resected the whole radius, with the exception of its articular head, which was sound, and that a useful arm was left. Excision of the lower four-fifths of this bone, was performed by Prof. Carnochan in 1857."

The following is the case of Dr. George Williamson, from his notes on the wounded from the mutiny in India, London edition of 1859.

"Staff Armourer Sergeant, H. W., aged 26, two years and a half in the service, of which five months were in China. He is of



healthy appearance. Was admitted into the general hospital, Hong Kong, in August, 1857, immediately after his arrival from England, with symptoms of acute hepatitis and pleuritis. Active depletion was had recourse to, and calomel and opium administered, which produced salivation, and the disease was arrested. On the 3d of September a large phlegmonoid tumor was found near the elbow joint, which was opened, and a large quantity of matter evacuated. From that time the ulna became permanently enlarged, extensive necrosis took place, and a few spiculae of bone came away. He was admitted into Fort Pitt Hospital, on the 1st of August, 1858, with numerous sinuses along the inner side of the left ulna, extending down to the diseased bone, and the probe also entered from behind into the elbow joint. The radius did not appear to be engaged in the disease. The patient's general health was good.

August 30. The whole of the ulna, as well as an inch and a half of the extremity of the humerus, and also the head and neck of the radius, were removed by a single incision along the posterior and inner side of the forearm, by Staff Surgeon Dr. Williamson. The skin was dissected back, and the ulner nerve cleared away from the internal condyle. The disease was found to extend the entire length of the ulna. An endeavor was at first made to disarticulate at the wrist by cutting the lower attachments of the ulna; but it was found to be much more easily accomplished by cutting the triceps and lateral ligaments, and getting into the elbow joint. The entire ulna was now disarticulated and dissected out. An inch and a half of the ends of the humerus and radius were then removed. No vessels required to be tied. The wound was left open for three hours, when sutures were inserted, and the arm placed upon a straight splint.

September 1. The arm was placed in a semi-bent position, and laid upon a gutta percha splint.

September 5. The whole of the wound had healed by the first intention, and the sutures were removed.

September 8. The splint was taken away, and he could move his fingers and hand, and get his left hand to his mouth with the assistance of the right, but could not do so of his own accord.

September 10. The wound completely healed twelve days after the operation.

September 12. He continues to move the joint and use his fingers; but is only just able at present to raise the forearm, showing

that he is beginning to regain the power over the biceps muscle. The arm is, however, small and weak. There is every prospect of the patient having a very useful arm and hand. His general health is good, and he is out of bed and going about.

On examination of the parts removed, it was found that the whole of the ulna was much enlarged, from the deposition of new osseous matter, enclosing several portions of necrosed bone. The whole of the cartilages covering the ends of the bones forming the elbow joint were absorbed, and the bones carious.

It is not often that a case occurs where the disease is entirely confined to the ulna and bones of the elbow joint. With regard to the operation, it was found much more easy to disarticulate from the elbow than from the lower extremity of the ulna, and care was required to avoid cutting the arteries and nerves by keeping close to the bone. It is also worthy of remark that no vessels required to be tied, although they must have been increased in size to supply the enlarged ulna. The rapidity with which the wound healed is also remarkable."

About the 29th day of January, 1869, Mr. R., an American, æt. 42, of strumous habit, called at my office for advice concerning his right forearm which was a little swollen and very painful. He supposed himself to be suffering from the effects of acute rheumatism, as the pain was near the elbow joint, and his general health impaired. This was on Wednesday, and he had continued to work at his business, carpentering, until the Thursday previous. From this time forward the swelling and pain of the fore-arm continued to increase, and although but very little redness was present, it was evident there was fluctuation near the elbow joint, and upon his being advised to have an incision made for its evacuation, declined doing so until Sunday, the 30th inst. The fluid was deep seated, and the bistoury penetrated at least an inch and a half before it was reached. This gave vent to a large quantity of unhealthy-looking pus, and was attended with great relief of the pain.

Previous to this, however, he told me that about a week before calling upon me, he had lifted a heavy piece of scantling, and that in doing so, he felt a severe pain, more like an electric shock than anything else he could compare it to, strike through his arm; but, notwithstanding, continued his usual employment, although there was considerable pain in the arm from the time of injury.

For some days after opening the abscess he applied a large poult-

tice to the arm, but the suppuration and swelling increased, at the same time extending toward the hand. I explored the wound with a probe, and found there was diseased bone (caries of the ulna). The disease, however, continued until the forearm was enormously swollen, and another abscess formed above the carpus; this also was opened, and revealed a carious condition of the ulna, as far as the probe could extend. His health becoming very much impaired from irritative fever, I recommended him to submit to exsection of the ulna, as the only means of relief short of amputating the arm, as the exploration with the probe denoted disease of the bone as far as it could reach from either opening that had been made for the evacuation of matter.

At this time my friend Prof. George C. Blackman kindly visited Mr. R. with me, and strongly urged an operation for the removal of the entire ulna. The patient, however, hoping against hope, deferred the operation until he felt convinced his life was threatened, his health and strength persistently giving way, until severe cough and night sweats had set in from the immense drain and irritation to his system, from the purulent discharge and severe pain, notwithstanding he had been under sustaining treatment for some weeks. Feeling, however, that an operation was the only remedy that promised any permanent relief, he decided to submit to having the bone exsected.

On the afternoon of the 25th day of February, I performed the operation at Prof. Blackman's clinic, at the Good Samaritan Hospital before the class of the Ohio Medical College, and many other medical gentlemen of this city. There was also present Surgeon Perrin of the U. S. army, and Dr. Wiest, of Richmond, Indiana. After administering chloroform, assisted by Dr. N. Foster and Prof. Conner, the former holding the brachial artery, and the latter having a blunt hook ready to hold the ulnar nerve out of the way, if necessary, I commenced my incision an inch above the olecranon process, and after dividing the triceps tendon and the lateral ligament, carried the incision down the inner side of the ulna, carefully dissecting off the muscles from the bone, leaving as much of the periosteum as possible, sometimes pressing it off with the fingers where it was loosened by ulceration, or using the handle of the scalpel whenever I could, until the incision extended an inch below the styloid process. I took the precaution to keep the knife constantly close to the bone when it was necessary to cut in order to avoid the vessels and nerves. The opera-



tion required but a few minutes to complete, and after waiting long enough to ascertain whether it would be necessary to ligate any bleeding vessel, closed the wound with sutures. No vessel required to be tied. Before closing the wound it was well washed out with a solution of carbolic acid. The arm after being dressed was laid upon a pillow, and the patient taken home in a wagon in the recumbent position, being very much prostrated in his already weak condition, by the shock of the operation and the effects of the chloroform. The other bones of the arm did not appear to be diseased, although the internal condyle of the humerus was dry and shining.



Profuse suppuration continued for some weeks after the operation, and for a few days the cough and night sweats increased; at the end of this time, however, his health began to improve. At the end of two months the wound had entirely healed, with the exception of a sinus underneath the elbow joint. After this healed, an abscess formed above the wrist not far from the articulation of the radius with the carpus; it was opened and after discharging for sometime, healed. His confinement to the bed lasted three

weeks. From this forward his health continued to improve, but abscesses would frequently form near the wrist and elbow during the spring and most of the summer.

July 1, 1870. I saw Mr. R. a few days ago, and find the usefulness of his arm to be very good and improving. The accompanying engraving, taken last February, just one year after the operation, is a correct representation of the condition of the arm at that time, and the representation of the bone which is held in the hand, is the one exsected from the arm, showing a very carious condition, looking almost as if it had been worn-eaten.

While there has not been perhaps as good a result in this case as some of those mentioned in the report, yet, I am convinced that in most of those cases of injury or disease of the bones of the forearm, whether involving the joints or not, it is much better to follow the conservative plan of procedure as in this case, than to resort to the more formidable one of amputation, and afterward feel the same self-reproach as that expressed by the great Velpeau.

With the exception of ankylosis of the elbow joint, the arm is nearly as useful as it was previous to the injury which led to the exsection of the ulna, this result being caused by subsequent inflammation of the other bones of the joint and not the operation. There is, I think, some reproduction of the ulna, commencing at the elbow joint and extending about three inches toward the hand. This latter circumstance may also have something to do with the ankylosis present.

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*Art. II.—Case of Alarming Results from an Attempt to Extract a Tooth.*

By GEORGE H. RUSSELL, M.D., Cheyenne, Wyoming Territory.

February 13, 1870. I was called in haste to see Miss B. from Ohio, who was visiting her uncle in this place. I found her in a state of hysterical convulsion, with her hand grasping her throat to avoid choking. Her pupils were dilated, her pulse feeble and slow, her head hot, extremities cold, and complexion bronzed.

As her nervous system seemed to be considerably agitated, I immediately prescribed Fl. Ext. Valerian ʒj every hour, with

cold application to head, and hot mustard water, with friction, to hands and feet.

I then made inquiry of her friends, who were very intelligent people, concerning the history of my patient, and learned that she had been suffering from chills daily for four months, and three weeks previous to this attack had called on a physician in the town to have an aching tooth extracted. The tooth was broken off above the neck, which caused her to cry out: "Oh, you have broken my back," when she immediately became insensible, and was soon in a state of muttering delirium, which lasted for six hours, after which she was taken home, but the toothache was more violent than ever, and this suffering had continued, with intermissions, up to the time of this attack.

Such were the facts before me. An intelligent young lady in delicate health, her nervous system weakened by excessive suffering from her broken tooth for three weeks, with pain and swelling over the spine in the lumbar region, and tenderness from that point along the spinal column to the base of the brain, and with intense headache in the back part of the head. I further learned that her appetite had been good, that her bowels had been regular and that she had always been quite regular in her monthly sickness.

In making up my diagnosis, I excluded all uterine complications, located the disease in the nervous system, and traced it to the shock produced by breaking the tooth and the suffering which followed, and I saw no reason in my subsequent treatment of the case to change my opinion.

The young lady having by this time partially recovered from her convulsion, I conversed with her a short time and left, promising to call the following morning.

February 14. Found her dressed and feeling as well as usual, tongue slightly coated, pulse seventy-five, but feeble, skin dark and dry and cold. She complained of feeling very tired and sore. She spoke of the swelling in her back, and of constant toothache, and of tenderness along the spine, and said that her head was not free from pain at any time, also that her bowels were constipated. She appeared cheerful, said that she did not think that there was much the matter with her, and was very desirous of being able to attend a social party at her house that evening.

I applied chloroform to her tooth which relieved her at once, and prescribed as follows :



Hydrarg. Chlor. Mit. gr. xv.

Ext. Colocynth Comp. gr. xii.

M.—Ft. pil. jv. Give one every 3 hours.

I also prescribed Tinct. Assafœtida ʒj in case she should have any signs of a convulsion that evening.

February 15. Had a convulsion last night, no movement of bowels, complained of intense headache, of being very tired, of pain in right shoulder, and of sharp lancinating pains in her chest, skin dark and dry, pulse seventy, and feeble.

I prescribed Ol. Ricini ʒj, with mustard to nucha and chest, and to be rubbed all over twice daily with mustard water, with instructions to give the assafœtida in case of returning convulsion. I promised to call the next morning.

February 16. Had a convulsion last night which came on suddenly and lasted an hour, was delirious the rest of the night, slept some, tongue thick and red but not coated, pulse seventy and feeble, chilly, skin dark and dry, and flesh hard, mustard had no effect, was very weak and tired.

I now saw that her convulsions were disposed to be periodic, occurring regularly at six o'clock in the evening, and I determined to try the effects of Quinine with a full dose of Dovero at night. The oil had produced its effect, I therefore ordered the treatment that I had decided upon, continuing the sinapism and mustard baths, with Spt. Frumenti *pro re nata* and Assafœtida, if any signs of convulsion.

February 17. Symptoms the same, only in a more aggravated form. I continued the treatment with the exception of substituting an opiate in place of the assafœtida.

February 18. Had a convulsion as usual last night. Tongue coated with white coat; her convulsion was followed by coma and delirium; cephalalgia not abated but increased; she was now fully under the influence of the quinine, did not expect to get well, and did not want to, was very impressible, had no control over the expression of her feelings, would cry and laugh alternately.

I found the quinine to be powerless and the opiates to act unfavorably. I concluded to withdraw them both and substitute the bromide of potassium. I therefore ordered gr. xii of it to be given during the day every two hours.

February 19. Had a convulsion as usual. Urine loaded and scanty, bowels and all secretions checked, nervous twitching of muscles of face, some delirium, and constant cephalalgia, feeling

of numbness in extremities; said her hands and feet felt as though they were asleep. Continued the bromide with the addition of Hydrarg. Chlor. Mit. gr. iii, and Morph. Sulph. gr.  $\frac{1}{6}$  every three hours.

February 20. Convulsion as usual, sharp pains in chest, tongue coated, headache increased, eyes dull and heavy, delirious. Continue treatment and apply blister to chest and ice to head.

February 21. Convulsion as usual last night, but pain in chest had ceased. Had been delirious and muttering incoherently all night, her pulse was low and feeble, her extremities cold, and her flesh hard, dry, and dark. I ordered the mustard bath to be continued, Spt. Frumenti every hour, ice to head, and hot irons to feet, and saline cathartic, and withdrew all other medicine except the various antispasmodics.

February 22. Convulsion as usual, delirious, very weak, could not turn over in bed, cephalalgia increased, pulse eighty and feeble, respiration difficult, numb and cold.

I now sat down by the bedside of my patient to carefully review the case. The young lady was getting worse every day. The medication had failed. She was daily losing strength and rapidly wasting away; her appetite was gone, and her evening convulsions had not been checked. Had I employed the right medicinal agents? Did I comprehend the case, or ought I to seek further for the cause of her convulsions? Should I examine the uterus? I could not believe that organ to be affected, for the menstrual function was perfect and she experienced no pain in that region. She would not allow her body to be touched above the plane of the umbilicus. Was this all hysterical and imaginary, or was her pain and sensitiveness real. Such were my reflections during this careful review, and I arose fully satisfied that my diagnosis was correct. Her trouble was in the spine and cerebellum. The entire nervous system was involved, both the cerebro-spinal portion and the sympathetic portion, from which cause the liver and other viscera failed to receive their wonted supply of nerve influence, if I may be permitted to use the term, and consequently were inactive. I will, therefore, continue to combat the inflammation in the cerebellum and spinal cord with outward applications, and give nervous stimulants and antispasmodics till the nerves are strengthened to such an extent that life may be prolonged until the inflammation shall be overcome, when I look for the convulsions to cease, after which her nervous system can get some

rest, and then assimilation and nutrition can go on without interruption. I therefore ordered a mixture of

Æther Sulph.  
Fl. Ext. Hyoseyami.  
Spt. Camphor.  
Tinct. Assafœt.  
Fl. Ext. Gelsemini.  
Tinct. Opii.  
Syr. Zingib.

February 23. She had a convulsion last night, but not as severe as before, no appetite, sordes on teeth, tongue thick, cephalalgia worse than ever. I ordered the mixture to be continued, also Spt. Nitre Dulc. every four hours, and brandy *pro re nata*, with

Quinia Sulph. gr. x.  
Capsici gr. iij.

To be given every morning.

February 24. Convulsion not so severe, but symptoms in head and spine considerably aggravated, not so cold and numb. Sub-sultus tendinum and carphylogia were now well marked; she was indifferent to all that was transpiring around her.

I ordered her head to be encased in ice, and an icebag applied the entire length of the spine, withdrew all medicine, and prescribed a mild cathartic with brandy every hour. The ice was faithfully applied all the rest of the day, and the following night.

February 25. Slight convulsion last night, delirious, twitching of the muscles and picking the bed clothes, pulse eighty and feeble, tongue thick and coated but not dry. Continued ice, with strict orders to take it off if she complained of cold from it.

Her hands and feet were cold, and she has repeatedly said from the beginning of her sickness that nothing was the matter with her, but she was going to die and medicine could not help her. She was cold inside, as she expressed it, her feet were asleep, numb, pricking; she coughed some, and was sure that her lungs were affected, though after a thorough examination I had told her to the contrary.

February 26. After thirty-six hours of faithful application of the ice to head and spine, during which time she was not conscious of it, she said that her head was cold, and the ice was removed. I found the head symptoms more favorable, and I left her with a promise to call in the afternoon, but at noon I was



called in great haste, with the word that they feared the young lady was dying.

I found the room full of weeping friends, and the patient comatose and almost pulseless, hands and feet cold and of a dark purple color. Hope had fled from the hearts of her friends, and I saw but one thing to encourage me, which was that the regularity of the convulsions had been broken up. How it would terminate remained to be seen. I immediately administered an enema of brandy and water, applied friction, and in an hour reaction was established and delirium followed, with constant rolling of the head. I now ordered a blister the entire length of the spine, and gave the following:

Strychnia Sulph. gr.  $\frac{1}{30}$ .

Ext. Colocynth Comp. gr. j.

Every six hours.

February 27. Had no convulsion last night, slept some, pulse stronger, cephalalgia abated to some extent. Prescribed dressing to the blister, and continue the strychnine.

February 28. Had no convulsion, bowels moved last night, good discharge of urine, better in every way with the exception of severe toothache, which I endeavored to control with chloroform and fomentations. After twelve hours and no abatement of the suffering from the tooth, I called at midnight prepared to extract it. There was no dentist in the town, and after putting her fully under the influence of morphia, I removed the remaining portion of the tooth with no unpleasant results, after which she slept quietly until morning.

March 1. She recognized me as I entered the room and talked pleasantly with me, as she had done nearly every day of her sickness. I found her refreshed by her sleep and looking better.

March 2. Still better. I ordered the strychnia to be continued and withdrew all other medicines, ordered a brandy sling early every morning, as she said she felt cold every forenoon. Her skin is recovering its original color; her courses came on last night at the usual time; her tongue is cleaning off; she has some appetite, has no acute pain, but says her spine is very sensitive, and feels as though it had been pounded. The purple spots on her body, which appeared about the ninth day, are all gone, but she is still delirious.

March 3. Appetite better, but still delirious.

March 4. Delirious until noon, when, after sleeping an hour,

she gave a sudden scream and said that something was tearing in her head. Delirium ceased from that instant. She looked around, asked if she had been sick, inquired for me, and does not recollect anything that has occurred from the first convulsion almost three weeks ago.

I continued the strychnine with the brandy. By the first of May she was able to sit up in bed, but had very little control over her neck and feet, but continued to improve slowly, so that by the last of May she was able to return to her home in Ohio. I have heard from her since, and she writes me that she is continuing to recover, and that the swelling in the back, instead of resulting in an abscess, as I feared it would, is subsiding.

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### *Art. III.—Cases of Poisoning by American Cicuta.*

By W. H. MATCHETT, M. D., Greenville, O.

There has recently been four cases of poisoning, in this county, from eating, by mistake, the Water Hemlock or American Cicuta. There can be no doubt as to two of them; the last two we are not *positive*, but from the examination, as I was permitted to make it, it is my opinion they, too, had eaten the same poisonous plant.

On the 2d of June, I was subpoenaed by the coroner of Darke county to make a post mortem examination of the bodies of Joseph Riley and his son Ivans Riley, of Franklin township, Darke county, Ohio (nine miles from Greenville), who, it was supposed, had died from eating some poisonous plant.

After repairing to the home of deceased and making inquiry of the relatives and neighbors, as to the cause of death, I proposed a "*sectio cadaver*" to examine the stomach, but met with opposition from the relatives and friends to such an extent that the coroner decided to dispense with an operation until we had examined other witnesses, and then if I still insisted upon it, he would use his authority in the case and *have* the examination.

The coroner requested me to examine the witnesses for him, and draw from them what I thought most needed to form an opinion without mutilating the bodies, as they wished to take them to Pymount for interment—a distance of some twenty miles.

As a preface to these, I will relate the circumstances of the first two cases mentioned.

In these there can be no mistake as to what they had eaten.

A few days before the 16th day of April, 1870, Mrs. Ullery, of Greenville, Ohio, was passing a marshy place where a ditch had been recently dug, she saw sticking in the side of the ditch a peculiar bunch or cluster of roots resembling a bunch of *small* sweet potatoes, but having a stalk resembling, as she said, the wild parsnips, about three feet high. She pulled it up and carried it home as a curiosity. After showing it to her family, she threw it in the wood-box behind the kitchen stove.

On the 15th of April Mrs. Ullery made pickles of artichokes. Her little son, aged 10 or 12 years, and a son of Mr. J. Shannon, about the same age, were playing about the house and doubtless noticed the artichokes. On the next day, 16th of April, during the absence of Mrs. Ullery, they found this peculiar bunch of roots in the wood-box and thinking it an artichoke, took and ate of it. In less than *one* hour they were both seized with convulsions; Mrs. Ullery's son died in two hours, the other lad, who, as he says, "had only eaten four bites" of it; "the other boy would not divide equal," was saved by the prompt action of Dr. Lansdown in administering an emetic of sul. zinc and decoc. lobelia inflata. He ejected the masticated root, yet he was insensible for three days.

The Doctor says there was no sweating, but a cold, contracted and pale surface, dilated pupil, frequent spasms, *some* diarrhea.

This lad finally recovered. These cases excited the community, and the medical men began an investigation of the plant, its place of growth and botanical name. (I have some of said root now in my possession.) It was found to be the *Cicuta Maculata*.

To return. The jury being impaneled and witnesses called, Mrs. Mary Ann Riley, wife of deceased, being duly sworn, says: "My husband, Joseph Riley, was plowing corn all day (June 1st), and my little son Ivy, aged 11 years, was setting up corn after his father in the south field; they came in to supper at half past four o'clock. Husband complained of feeling so queer, as if he would fall to pieces. He sat down in the kitchen door. Ivans (son) went to the table and ate his supper; but husband did not eat. While Ivans was at the table eating, husband went to the stone at the corner of the house and vomited, or tried to, but could throw up nothing but water and froth. He came in the kitchen and



laid down on the floor, under the window. Pretty soon he got up and went out and tried to vomit again. The little boy ate his supper and immediately went out and vomited it up. Then (and for the first time), my husband said, "I fear I have poisoned both of us by eating, and giving Ivy to eat, that spikenard." Ivy came in, after vomiting, and took a piece of pie and was eating it, when he took a fit. I asked Jo what he had eaten; he said, "Spikenard, I thought it was."

I sent my little girl to Mr. Casper's, as soon as Ivy took the first fit. Mrs. Casper came over, and Mr. Casper went for a doctor. My husband assisted in holding the little boy while he had the first fit. He soon after took a spasm himself, and never spoke to me again. They did not sweat, but were very cold, pale, and weak; could not hold up their heads, or hands even, when the fit was not on. They lay in fits, one after another, for about two and a half hours and died. Husband died about five or ten minutes first. My son only spoke once after the first fit; he said, "Mother, don't cry for me." He was eleven years old. Mrs. Casper and Mr. Staffy came in while husband had the first fit."

Mrs. Casper being first duly sworn, testifies: "That she lives a near neighbor to the deceased; that Mrs. Riley sent her little girl for me. When I came in, the little boy was in a fit; Mr. Riley was sitting in the door. I asked him which doctor was sent for. He said, Keister. I asked if he had eaten the spikenard, too? He gave an affirmative nod and grunt (meaning yes) and immediately fell back in a fit. I think it was half past five in the evening. I think they lived about one and a half hours after I came in; both made an effort to vomit, but threw up nothing but water and foam. The doctor did not get there until after they died.

John Graham being duly sworn, testifies: "That Mr. Riley had a fit when I came in. Mrs. Riley told me they had eaten spikenard in the field. I went for a doctor—they were dead when we got back."

Jacob Riley being first duly sworn, says, "I am a brother to the deceased. I was here about half an hour before they died. They continued in spasms until death. Mr. Schneck first mentioned to me about their eating spikenard in the field. This morning I, with others, went to the field to inspect the ground where he had been plowing. In the last rows he plowed, we found this bunch of roots (exhibiting it) resembling a bunch of small sweet potatoes,

plowed or dug up. You see there has been two of the potatoes or roots broken off here. We could not find any of the pieces thus severed. We found in the fence corner near the end of the last row plowed, a fine bunch or stalk of spikenard, but it had not been dug or disturbed, but within a few feet of it we found quite a quantity of these other roots mentioned, and here exhibited. The character of the ground where these grew, is low, wet, black soil. Last harvest I and my brother were cradling barley together in this field. I came to this plant and my scythe cut the top off of it. He remarked: "You have cut down a fine stalk of spikenard." I told him I did not think it was. *He contended that it was.* It was the same kind as here exhibited, which I got in the field he was plowing in."

The other testimony was only corroborative of the facts above stated, and not necessary here to mention. I have some of the plants and roots exhibited to me, and said to be procured in the last rows plowed by Mr. Riley on the 1st. They are identical to those used by the first cases mentioned, the *Cicuta Maculata*, or Water Hemlock.

My testimony to the jury was, that "I had carefully examined, ocularly, the bodies of Joseph and Ivans Riley, the deceased above mentioned, and find the "rigor mortis" complete; no emaciation; showing death from short illness. From the evidence I have heard, and from the plants and roots exhibited, I am of the opinion they came to their death from eating, by mistake, the *Cicuta Maculata*, a virulent narcotic poison, supposing it to be spikenard.

DOCTOR: I send the report of these four cases—not as complete as I could wish—but the best I could do without going wholly against the wishes of the friends of the deceased, and make an examination of the stomachs.

I have no knowledge of the poisoning of animals by this plant; many rumors, however, are afloat of sheep and cattle being killed by it; but rumor is not fact. In early days of the settlement of this county, the "milk sick" was a dreaded disease, and many are of the opinion this plant was the poisonous agent, but for some years past we have met with no cases of milk sickness, yet we find the *cicuta* growing in our low or marshy pastures.

*Art. IV.—Pathology and Treatment of Tuberculosis.*

By WADE MINOR LOGAN, M. D., of Cincinnati.

Without pausing to discuss the relative merits of the various theories that have been proposed concerning the nature of this disease, or for other preliminaries, I proceed to the consideration of some investigations that I have recently made.

The chemical analysis of tubercle shows that the phosphates, especially the phosphate of lime, is the inorganic element of this morbid deposit, just as iron is an inorganic element of hæmatin. And according to that law of physiological chemistry known as vital affinity, we would reasonably expect the introduction of the phosphates into the system of a tuberculous subject to give rise to a corresponding increase of the tubercular deposit. And by a series of experiments conducted by Mr. John Taylor\* upon tuberculous subjects in the Liverpool workhouse, they were found to hasten the development of the disease; and would seem to tend conclusively, in the estimation of that gentleman, to the establishment of our hypothesis.

Such distinguished men as Profs. L. M. Lawson, Henry Harts-horne, and Geo. B. Wood, after repeated trial of the phosphates and hypophosphites of lime, soda, and potassa, have published the results of their experiments, expressing their discouragement.

I do not know of any one who now claims for them that degree of reputation which Drs. Stone, Churchill, and others, at one time anticipated that they would enjoy. I have, indeed, been employed in cases in which the patient had gradually sunk under them in the care of other and first-class practitioners, when a directly opposite course of medication was instituted, followed by the most flattering results.

"The urine of tuberculous subjects," says Lawson, "appears to contain less solid constituents, particularly the nitrogenized elements, while the salts, especially the phosphates are in excess" (Lawson's Treatise, p. 454); and this statement has been supported by the majority of my own observations. Niemeyer, in speaking of laryngeal phthisis, says, that in the progress of the disease, the laryngeal cartilages frequently undergo ossification.

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\* Stille's Materia Medica, vol. 1, art. Phosphorus, p. 686.



He also states, as do all others, that "it is exceptional\* for persons deformed by rachitis" (in whose systems there is a deficiency of the phosphates) "to become or die tuberculous." "Freund, of Breslau, regarded ossification of the first costal cartilage as a cause of phthisis; on the hypothesis that it prevented the free expansion of the chest, and by its acting as an irritant produced inflammation at the apices."† I myself, when a student, long before the conception of this theory, noticed in opening the chests of a number of tuberculous *cadavers*, that *all* the costal cartilages were quite hard; one case in particular, a young female apparently about twenty years of age, in one of whose lungs were large tubercular masses, while in the other was a large cavity; and whose costal cartilages were almost as hard as bone, which I then attributed to the disturbance of circulation and nutrition as having probably given rise to an almost perfect state of dryness in those tissues. Dr. Frick, of Baltimore, analyzed the blood of four cases during the existence of crude tubercles, and states that, among other deviations from the normal standard, he detected an increase of lime, the quantities in the different cases being respectively .272, .257, .276, .283; remarkably contrasting with .183, the normal proportion; and Baumes claims to have detected in the blood an excess of phosphoric acid. (Lawson's Treatise on Consumption, pp. 57 and 145.)

Again, bearing on this point, Dr. Lawson, in treating of gray tubercles, says, "they vary in size from that of a millet seed to that of a pea; and in consistence from a soft structure to *almost cartilaginous hardness*; being somewhat friable, and presenting a granular surface when cut." (Lawson's Treatise, pp. 32 and 33.)

It is obvious that their soft structure is most probably due to the deposit being quite recent; still in a partial state of solution, their more fluid constituents not yet having been absorbed; and that "their almost cartilaginous hardness" is due to their being to a great extent of a calcareous nature, with their fluid properties completely absorbed.

In regard to cretaceous tubercle, Dr. Lawson says "the chemical analysis of cretaceous tubercle shows that the animal matter becomes absorbed, while the earthy or inorganic materials remain. The relative proportion of the organic and inorganic substances

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\* Niemeyer's Practice, from the 7th German ed., vol. 1, p. 129.

† Dr. J. T. Whittaker.

in the two forms of tubercle becomes exactly reversed when the cretaceous change occurs, which is doubtless due to the absorption of the organic, while the vessels are incapable of taking up the inorganic. Pathologists speak of this change as absorption of the organic elements, while the deposition of the inorganic continues, and thus replaces the former substance. According to this view, the earthy material is an independent secretion, continuing after the deposit of the ordinary tubercular matter has ceased. It is far more probable, however, that the whole mass is deposited in the usual form and composition of tubercle, and that the ulterior changes result from the absorption of the fluid elements, while the earthy substance, being incapable of re-entering the vessels, remains in the cavity." (Lawson's Treatise, p. 96.)

Thus it is seen that the phosphates, especially the phosphate of lime, perform no insignificant part in the process of tuberculization and development of phthisis.

Now, in regard to the origin of tuberculosis, let us draw a parallel, by which may be seen the most striking analogy. Sugar normally exists in the blood nowhere else than in the venous circulation between the liver and lungs. In the lungs it is destroyed by the catalytic action of the air; being converted, first, into water; second, into lactic acid; third, into carbonic acid; then and there being voided by the respiratory process. (Williams' Principles of Medicine, p. 163.)

Now, if from some defect in elaboration (as often occurs in persons possessing the rheumatic diathesis), the third change, by which the lactic acid should be converted into carbonic acid, does not take place, blood poisoning would soon be manifested by symptoms of acute articular rheumatism.

So may it not also seem probable\* that the phosphates, to a certain extent, normally undergo some catalytic or other change, either preparatory to performing or after having performed their function in the economy, and that in the presence of the tuberculous diathesis, by this physiological process being interfered with, either by pre-existing debilitating causes or otherwise, a state of

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\* "When the sabulous deposit" (that is, the phosphates in the urine) "depends upon certain disordered states of digestion, this agent may prove beneficial by restoring the tone of the stomach." (U. S. Dispensatory, 11th ed., p. 47.)

The "normal change" in the above paragraph alluded to, Prof. Bartholow considers to be that of oxydation, which is effected by the process of digestion.

cachexia or blood-poisoning is produced, which, failing to be eliminated from the system, increases in quantity until finally its existence becomes manifested by the familiar phenomena which accompany the development of tuberculosis.

Concerning the deposit of tubercles, the theory accepted by Lawson, Watson, and others, was, that it took place by the exudation (perhaps spontaneously in most cases) of a certain specific humor (by us supposed to be to a great extent of a calcareous nature); and Prof. J. H. Bennett says that "calcareous deposits which do not assume the form of a bony growth are usually the result of an exudation." (Bennett's Practice, 3d ed., p. 271.)

According to the accepted theory on tuberculosis proper, two separate and distinct forms of tubercle were recognized, viz: the gray and the yellow. In regard to the ultimate tendency or result of the two varieties, Dr. Lawson says: "While the yellow variety naturally tends to softening and elimination, the gray as constantly undergoes a retrogressive action, and never softens except as a result of its *possible transformation*\* into the former species," etc. (Lawson's Treatise, p. 34.)

How could the gray become transformed into the yellow variety? By acting as a foreign body it would cause inflammation, and the *consequent exudation* would be in the immediate vicinity of and around the mechanical irritant, and as the more fluid constituents of the exudation would be becoming absorbed by the surrounding lung tissue, its more plastic or solid elements would accumulate around and adhere to the gray tubercle previously deposited, thus transforming the gray into the yellow variety. And we can thus easily understand why yellow tubercle contains a preponderance of albuminous or albuminoid material over either the gray or cretaceous varieties.

And the degraded condition of the blood plasma presently to be alluded to, which would furnish the exudation with corpuscular rather than coagulable lymph, explains in my opinion the source of the caseous matter of crude tubercles, which Niemeyer seems to have attributed to a different process. Then, my opinion is, that after the tubercular exudation, or the exudation of the "*sui generis*" specific poison, that gray tubercle is the initial lesion of tuberculosis just as chancre is the initial lesion of syphilis.

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\* "Lænnec accepted this conversion, which Rokitansky for a long time denied, but now considers frequent. Herard declares it to be universal." (Hartshorne's Essentials, 2d ed., note at bottom of p. 33.)



Thus far I have explained the probable *modus operandi* of tuberculization, that is, the production of a specific poison, which became deposited in the form of a semi-fluid exudation, its development into gray tubercle, which afterward became transformed into yellow tubercle, and this (if not destroyed by suppuration and softening), as a curative agency, into cretaceous tubercle. Having considered the four stages of the development of tubercle, I will now speak of two frequent, indeed almost constant concomitants of this disease. I now have reference to the pathological or aplastic condition of the blood plasma, and to fatty degeneration of the liver, which, as will hereafter be seen, have a special relation to my method of therapeutics. "Fibrine, identical with the buffy coat of the blood, is the material of which new membranes and cicatrices are formed; it is the *coagulable lymph*, indeed, which is the plasma or basis of the constructive and reparative process. In its capacity for these processes fibrine exhibits some modifications of condition constituting degrees of plasticity. Thus, in a healthy state (euplastic) it forms a fine congeries of minute fibrils, which, having a high capacity for life, may become organized in a high degree, as in the case of false membranes resulting from acute inflammation in a healthy subject. But in many instances, this high capacity is degraded, and the nutritive material is *cacoplastic*, with fewer and less perfect fibers, and with more corpuscles, giving the exudation more opacity, and is susceptible of only a low degree of organization, as in the indurations resulting from low or chronic inflammation, in cirrhosis, gray tubercle, etc.; or it is *aplastic*, not organizable at all, abounding in degenerating corpuscles with few or no fibers, as in pus, curdy matter, yellow tubercle, etc." "In case of deficiency of fibrine from the presence of a febriferous or putrescent poison in the system, it is not to be expected that azotized food, rest, or any other means, can remove the deficiency so long as the poison remains in active operation. This poison, by its septic or other analogous influence, interferes with the vital process by which the fibrine is formed. But no sooner does the influence of the poison subside, as evinced by improvement in the symptoms, than the quantity of the fibrine increases, and this faster than could be explained by any increase of nourishment taken." (Williams' Principles of Medicine, pp. 157 and 160.)

Fatty liver, also, is almost peculiar to phthisis. In three years Louis met with it forty-nine times, and forty-seven of the patients

died phthisical. It occurred in one-third of the victims of consumption, whereas, among 223 cases not phthisical, there were only two examples of this hepatic change.

I will here waive any remarks on the *softening of tubercles*, but merely state that I consider it as being purely suppurative, and an effort of nature to rid herself of the abnormal deposit, just as a thousand other foreign bodies are removed from the flesh by festering.

#### TREATMENT.

I will now say a few words in regard to my method of therapeutics. Seeing that cod liver oil, whisky, and other fashionable (and in many cases objectionable) medicinal agents are far from being even reliable in the treatment of this disease, a sense of obligation to the honor and integrity of our humane profession, and to the welfare of the suffering and dying victims of tuberculosis, behooved me to the study and cultivation of this disease as a specialty; in quest of something curative, in addition to our elaborate category of palliative medicines. And I now take great pleasure in candidly stating that I feel confident of suggesting a great improvement upon even the most recent therapeutics, by introducing to the profession nitric and muriatic acids in the treatment of pulmonary phthisis.

In regard to the medical properties of these agents, parties are referred to works on therapeutics. For the present I will recapitulate briefly some of the opinions of a few of the most eminent authorities. Nitric acid is tonic and antiseptic, having been successfully used in typhus and malarial fevers.

"Dr. Arnoldi, of Montreal, proposed it as almost a specific remedy for *whooping cough*, and his recommendations have been sustained by Drs. Gibb, Witsell, Acherly, Menelly, Noble, and others. Under its use the violence of the paroxysms is said to be greatly mitigated, and the duration of the disease abridged by more than one-half. In *chronic bronchitis*, with exhaustion of the system, and a frequent harassing and paroxysmal cough, Dr. Glover derived material advantage from the employment of this agent. Five or six drops of nitric acid in a glass of sweetened water, taken twice a day, has been highly recommended for the removal of *hoarseness* in singers." (Stillé.)

It has been highly eulogized for its efficacy in syphilis and chronic affections of the liver, on the hypothesis that its action was somewhat like that of mercury. And in the treatment of

fatty degeneration of the liver, which I previously mentioned as being a frequent concomitant of phthisis, Dr. C. J. B. Williams, of London, recommends "nitric and nitro-muriatic acids upon the hypothesis of their being of an opposite nature to fat, thus affording abundance of oxygen which may remove a part of the superfluous fat, at the same time supplying azote, which may contribute to the formation of a more highly animalized plasma." (Williams' Principles of Medicine, p. 375.)

Chapman and Rayer speak in the most eulogistic manner of the internal use of nitric acid in the treatment of *impetigo* and scrofulous sores presenting a cancerous aspect, after all other forms of treatment had signally failed; supposing its virtues to depend upon its furnishing azote in a concentrated form, at the same time being an alterant, thus promoting the formation of the nutritive fluids.

And in the treatment of the degraded condition of the fibrine, which I before quoted from Dr. Williams, both when it depends upon ordinary causes, or "when it depends upon the presence of a febriferous or putrescent poison in the system," this eminent clinician recommends these two agents in the first instance on this hypothesis: "Which, from their power in stopping passive hemorrhage, in augmenting the muscular substance and strength, and in causing the healing of phagadenic and flabby ulcers, seem to have some more direct means of promoting the formation of the plasma of the blood than by their mere operation on the digestive organs." And in the second instance he says: "Their beneficial operation is probably connected with their antiseptic as well as with their stimulating power." (Williams' Principles, p. 160.)

"As nitric acid dissolves both uric acid and the phosphates, it was supposed to be applicable in those cases of gravel in which the uric acid and phosphates are mixed." (U. S. Disp., 11th ed., p. 47.)

And in support of its antiphosphatic\* virtues, I could, if space permitted, make elaborate quotations from such eminent authorities as Golding, Bird, Brodie, and others.

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\*Prof. Bartholow, while agreeing with Prof. J. H. Bennett and other pathologists in the derangement of digestion incident to phthisical cases to consist in part of excessive acidity, says that this condition prevents the oxydation of the phosphates, which "change" he considers necessary to prepare them for assimilation; and that in such cases the *mineral* acids are indicated, owing to their tonic and oxygenating properties.



In regard to the medical properties of muriatic acid, I would say that they are somewhat similar to those of nitric acid, it being tonic, antiseptic, antiphosphatic, chologogue, etc. I use this agent merely as an adjuvant to nitric acid, on account of those properties just mentioned, adhering more tenaciously to nitric acid as being of greater utility on account of its highly reputed efficacy in "*whooping cough, chronic bronchitis, and the hoarseness of singers,*" showing that it exerts a peculiar soothing influence on the irritable state of the lungs, probably in the same way that chlorate of potash thus acts on irritable conditions of the larynx, or through some other peculiar agency, sufficing it to say that such properties are undeniable in the presence of so much eminent authority.

Again, the most approved diet for consumptives in modern practice has been beef steak, mutton chops, veal cutlets, and other articles of the nitrogenous variety. "Nitrogenized foods," says Thomas, "are substances containing nitrogen, and supposed to be the only substances capable of being converted into blood, and of forming organic tissues." (Thos. Med. Dictionary.)

This being the case, it will readily be seen that the introduction of nitric acid into the stomach during primary digestion, will render the food more highly nitrogenous by reacting upon the contents of the stomach, forming nitrates.\* Bearing somewhat on this point, I here quote a paragraph from a very sensible paper on the "Digestive Assimilation of Medicine," by Dr. W. J. Elstun, of Indianapolis:

"Medicinal substances are assimilated by the same selective or physiological affinity, through which each organ selects from the blood the particular food material required for its own support, nourishment, or vitality." (Western Journal of Med., Oct. 1869, p. 619.)

From the foregoing statements it will be seen that both these agents, more especially the nitric acid however, are appropriate remedies for the treatment of all stages of the disease; their combined properties being appropriate in all, but more especially in the first and second stages when the tubercular matter is being formed and deposited. And in the third stage, when excavation is taking place, it does not seem improbable that their antiseptic properties should, to a certain extent, antagonize the breaking

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\* "Nitric acid is the source whence all the other compounds of nitrogen are obtained." (Silliman's Principles of Chemistry, 32d ed., p. 203.)

down of tissue that accompanies and constitutes a part of the process of suppuration and softening of tubercles, in the same way that those properties of *carbolic acid* thus act when locally applied.

Therefore, when we consider carefully and intelligently the precise relation of this pathology to these therapeutics, the practicality of this theory and utility of these agents becomes quite apparent, as will be shown by a subsequent report of cases. Now, a few words in regard to the employment of these remedies. Nitric acid I administer in doses of gtt. xl, of the official dilute *in aquæ puræ*  $\zeta$ ii, immediately after each meal, for the purpose of aiding digestion, and for other reasons already given. The quantity of muriatic acid which I administer is contained in gtt. xxx vel. gtt. xl of Tr. ferri chloridi, giving this agent for the two-fold purpose of both the acid and iron, having it taken sufficiently diluted half an hour before each meal, thereby getting its stimulating or appetizing influence.

Finally, while I claim for these two agents a great degree of superiority over even the most recent recognized therapeutics (considering alcoholic stimulants as being worse than useless, except in cases of extreme exhaustion), I would also state that it is not my intention thus to supersede cod liver oil, suitable food, good hygiene, and other valuable and important measures, but that the medicines by me suggested are intended only as adjuvants to other appropriate measures at the discretion of the practitioner. Neither do I propose, by this method of treatment, to cure "the tuberculous diathesis" any more than colchicum and the alkalies would cure "the rheumatic diathesis."

I have thus thrown together a few thoughts upon this interesting and important subject, and if this disease henceforth ceases to be the *opprobrium* of our profession, or if inquiry is hereby excited and truth elicited, my object will have been fully obtained. In support of the views herein given, see following tabulated report of cases:

Date.	Case.	Age.	Sex.	Temperament.	Married or Single.	Occupation.	Nativity.	Physical Condition.	Length of time under treatment.	Result.
1839.										
May 18	1st	33	Male.	Bilious.	Married	Clerk.	German.	Dullness on percussion, rude inspiration, prolonged expiration, bronchial breathing, and bronchophony over the upper two-thirds of sup. lobe of left lung.	3 months.	Recovery.
"	2d	16	"	Nervo-sanguine	Single.	Wiro-weaver.	"	Cracked pot resonance, with cavernous respiration and pectoriloquy over the entire sup. $\frac{1}{4}$ of right lung. Also, dullness on percussion, rude inspiration, prolonged and jerking expiration, with occasional moist crackling at apex of left lung.	13 "	Recovering.
June 3	3d	26	Female.	Bilious.	Widow.	Teacher.	United States.	Slight dullness on percussion, rude and tremulous inspiration, and dry crackling on forced inspiration, with prolonged expiration at apex of left lung.	3 "	Recovered.
" 15	4th	17	Male.	Phlegmatic.	Single.	Apprentice at tailoring.	German.	Bronchophony and mucous rale approaching cavernous, with dullness on percussion over the sup. $\frac{1}{2}$ of upper lobe of right lung. Also, friction rales and slight rudeness, and prolongation of the respiratory murmur, with slight dullness under left clavicle.	8 "	"
" 26	5th	22	Female.	"	"	Saleswoman.	United States.	Decided dullness on percussion, with dry crackling and rude inspiration, while the expiration effort was much prolonged over the upper part of left chest. Also, sonorous and sibilant rales over both lungs.	6 "	"
July 4	6th	"	Male.	Nervo-sanguine	"	Clerk.	England.	Great dullness, with local depression, rude inspiration, and prolonged expiration at apex of right lung. The same, but less marked on left side.	6 $\frac{3}{4}$ "	"
" 20	7th	27	Female.	Nervous.	Married	House work.	German.	Dullness over the upper fourth of left lung, with rude inspiration, prolonged expiration, bronchial breathing, and bronchophony. Slight dullness, with rudeness and prolongation of respiratory sounds at right apex.	6 "	"
Aug. 3	8th	23	"	Nervo-sanguine	Single.	Prostitute.	United States.	Considerable depression and dullness, with humid crackling, bronchial breathing, and bronchophony under right clavicle. Also, some evidence of deposit at other apex.	7 $\frac{1}{2}$ "	"
Sept. 18	9th	14	"	Bilious.	"	Nurse.	Colored.	Amphoric resonance, with cavernous respiration and pectoriloquy in sup. lobe of right lung. Dullness over entire left lung, mucous rale and ægophony over its sup. lobe.	2 "	Favorable.
Oct. 18	10th	18	"	Nervous.	"	House work.	United States.	Infiltrated tubercle diffused throughout the entire upper lobe of left lung. Cavernous respiration and pectoriloquy at apex of right lung.	13 days.	Died.
Nov. 29	11th	32	"	Bilious.	Married	"	"		7 months.	Recovering.
1870.										
Jan. 8	12th	28	Male.	Nervous.	"	Laborer.	German.	Considerable tubercular deposit at apex of both lungs.	6 weeks.	Died.
" 15	13th	45	"	Bilious.	"	"	"	Considerable flattening of thoracic wall, with dullness and other signs of tubercular deposit at apex of right lung.	5 months.	Stationary.
Feb. 16	14th	44	"	"	"	Tinner.	United States.	Same, but less marked, on left side.	4 "	Recovering.



As stated in our preliminary paper, these cases were treated with nitric and muriatic acids, aided by various auxiliaries as counter-irritants, narcotics, expectorants, cod liver oil where it was tolerated, etc., using very little alcohol, however.

I may briefly mention, by way of comment upon *Case 1st*, that *Thompson's* line on the gums was noticed to have disappeared on the 16th of June. Patient had no cough (except during the occurrence of *partial* pleuritic attacks) to indicate the presence of inflammatory actions, therefore my diagnosis was tuberculosis of the gray variety; and the total disappearance of percussion dullness and abnormal respiratory sounds was, in my estimation, "proof positive" of the antiphosphatic virtues of the treatment. This patient, like all the others, was very much emaciated.

*Case 2d* was emaciated to the most profound degree. Gained ten or fifteen pounds more than his original weight by the 1st of November, and pursued his occupation during the day and attended night school in the evening throughout the winter. I have not seen him for some weeks, but a casual examination then indicated some evidence of pulmonary lesion.

*Case 3d* had been in bad health during three years preceding, at which time she had a miscarriage with great loss of blood. On the 17th of October I received a letter from her stating that her health was then as good as ever.

*Case 4th*, being a scrofulous subject, took *syr. ferri iodidi* instead of *tr. ferri chloridi*. At time of dismissal, although his general health was good, there was still evidence of pulmonary lesion in right lung.

*Case 5th* had been able to pursue her occupation *without fatigue* six weeks prior to dismissal, while the catamenia had for three months been perfectly natural.

*Case 6th* was a perfect success, except a slight flattening of thoracic wall under right clavicle.

*Case 9th* improved rapidly while under my treatment, but in two months, owing to removing to a distant part of the country, she passed from my further observation.

*Case 10th*, owing to intra-thoracic tendencies, could have no physical examination made. She improved favorably till the day before her death, which was partly caused by a fresh exposure.

*Case 11th*, notwithstanding her miserable sanitary surroundings, is the most satisfactory case of any kind that I have ever treated. She had occasionally expectorated cretaceous tubercles, which

occasioned great inconvenience, suffocation, etc., prior to my attendance; but now when they are expectorated, it is done with the utmost facility. This, I think, is due to the antiphosphatic virtues of the treatment; and for further comment on this point, see paragraph on "*modus operandi*" at close of these remarks.

*Case 12th* was so low that I was unable to make any satisfactory physical examination. He had been unable to eat or sleep satisfactorily for three months previous to my attendance, and neither appetite nor rest could be obtained, the latter by narcotics, of which all were tried in maximum doses, but without avail; he gradually failed and died on the 20th of February. In neither of the two fatal cases was I able to obtain an *autopsy*.

*Case 13th* is a man broken down by debauchery, and has obstinate dyspepsia.

*Case 14th* is also broken down by debauchery, as evinced by his previous history and present condition; but nevertheless the treatment of his case has been throughout of the most satisfactory character. In seven weeks from beginning the treatment he went to work, and during the first week that he was working he gained two and a half pounds, notwithstanding his having previously been given up by a leading homœopathic physician, and subsequently by an eminent medical professor in this city.

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As a gentleman in the "Academy of Medicine" was unable to understand that the lungs when once involved could ever be freed from tubercular deposit, it may be well to say a few words in regard to the *modus operandi* of this treatment as regards the removal of tubercular deposit.

Dr. Lawson, in regard to this matter, makes the two following propositions: "*To promote the elimination of tuberculous matter;*" "*To promote the absorption of tubercles.*" (Lawson's Treatise, pp. 448 and 456.) And for this purpose he recommends various alterants, as iodine, bromine, alkalies, mercurials, sarsaparilla, etc. And for the removal of inflammatory products (for it will be remembered that according to either Niemeyer's or my own theory, that the caseous matter of crude tubercles is the result of inflammation), Dr. Williams recommends these agents, and goes on to state that he can affirm from much experience in its use that *nitric acid* is the best medicine he knows of for that purpose, supposing its action in part to be by "further oxygenating them." (Williams' Principles of Medicine, p. 346.) On this point, also see notes at bottom of previous pages.

## Clinical Reports.

### *Case of Vesical Calculus—Lithotomy.*

With Remarks by W. H. MUSSEY, Surgeon, Cincinnati Hospital. Reported by F. P. ANDERSON, Resident Physician.

June 13, 1870.

GENTLEMEN: I present to-day a case of stone in the urinary bladder.

The patient, a boy eight years of age, has exhibited indications of his malady for the past six months in characteristic paroxysms of pain that would have directed the educated surgeon at once to the true cause, but which elicited anything but sympathy from his ignorant mother, who punished the child frequently and severely for unreasonable irritability of temper.

The rational signs in this case are particularly well marked. You see how much elongated his prepuce has become from his pulling it, to alleviate the pain referred to this part; moreover, he has general incontinence of urine, with occasional retention, that change in position relieves; intense pain after micturition, when the contracting bladder clasps the stone; prolapse of the rectum—a very common complication with children; hæmaturia, and a deep, constant pain in the perineum.

I sounded the lad, three days since, and recognized the presence of calculus. Although without the use of the blades of the lithotrite, we can approximate only the size, I take it, this stone, has a diameter of about three-quarters of an inch.

An examination of his urine has been made: the deposit is of uric acid and the ammonio-magnesian phosphate.

There are two grand methods for operating in these cases, lithotomy and lithotritry. Of the former we have various modifications: the high operation, by which the bladder is entered above the pubes by dividing the skin and subjacent tissues in the space not touched by the peritoneum, and cutting down upon a style into the viscus; the stone is then grasped by a pair of forceps curved in the edge. Another method is by cutting through



the recto-vesical septum. A third, the perineal section, which consists in cutting through the membranous portion of the urethra and dividing the prostate gland; the external incisions determining its sub-divisions of lateral, bi-lateral, median and medio-bilateral. Of these the section through the rectum is discarded entirely, and the supra-pubic is unpopular, but recently has been recommended—for no other reason, as I can conceive, than to be singular; it ought to be abandoned. The lateral was the operation of frère Côme; he cut through the perineum upon a staff in the urethra, making the incision, in the left side, from a point in the raphé at a safe distance from the anus, downward and outward, in a line midway between the verge of the anus and tuber ischii. The bilateral is also employed, and Mr. Fergusson was once partial to this operation; in addition to the incision just described, a similar incision is made in the opposite side, dividing both lobes of the prostate. At one time he relinquished this for the lateral, but he advocates again the bilateral. This has been followed by many surgeons. My father preferred it, and gave as his reasons the ease of finding a way through the cellular tissue with the finger, along which the knife may be carried into the bladder, by dividing the left lobe of the prostate, then turned with the edge in the finger nail, protecting the structures, for the opposite side. With such control, there is little danger of too free cutting; moreover, the bladder may be held whilst the knife is withdrawn and the forceps readily introduced.

To facilitate this operation we have the double lithotome cache of Dupuytren, made after the fashion of frère Côme's concealed bistoury. I look upon it as dangerous, and have never used it; the blades are of necessity fine and yielding, thereby exposing the bowel to injury. I have treated a case of recto-vesical fistula caused by this instrument.

As to the median—revived by Allerton—it is claimed you do less damage and the wound heals more quickly; the same is held for the medio-bilateral, a favorite operation with the late Dr. J. Mason Warren. This method I tried once, and was dissatisfied with it. In fact, it is liable to heal too quickly. I maintain that it is advantageous in many cases to have some suppuration, and it is positively essential to have a free exit for pus and to avoid all danger of infiltration of urine, although the latter complication is considered by most surgeons a mere bug bear, and I may add that I have never seen a case of the kind. Be that as it may, it is an

important consideration that you have a safety valve, for if there be no danger of infiltration, there is danger certainly of a large sinus if your external wound close too soon. And here is just the reason why inflammation supervenes so often, the bladder is not relieved after its irritation from the concretion.

The bilateral is my choice; after the dissection of the skin I dissect with the finger and the point of the knife until I open the urethra, and I do not withdraw the finger before a curette is passed, along which I introduce a catheter to wash out the bladder thoroughly. It is my custom to leave the catheter in the wound for twenty-four hours or more, thereby establishing a perfect channel through the consolidation of the tissues about it.

In lithotrity, a method devised by Herteloupe, there are various instruments employed. The object is to crush the stone, the debris coming away spontaneously through the natural channel with the urine, or being washed out by means of a catheter.

Here is the lithotrite of Herteloupe, and here another form, fenestrated; another, where the upper fits down into the lower blade; here is one that is spoon-shaped, and this one is to be used where great force is requisite, the shaft being struck a smart blow with this mallet. Mr. Civiale developed this in connection with Le Roy d'Etiolle, and as both contestants are dead, the much disputed question of priority is settled, doubtless, to their satisfaction. The chief point is to get the stone within the grasp of the instrument and avoid injury to the coats of the bladder. Sometimes this is done very neatly by depressing and giving the instrument a little rotary shaking. Mucilage is injected often to protect the bladder and facilitate finding the stone, but it is of little advantage and sometimes increases our difficulties; I never employ it.

In the female we rarely consider the question of cutting at all; in the male I am governed by age, condition of patient, size and quality of stone, as well as by the length of time it has existed. In the child, where the urethra is narrow and the neck of the bladder small, or in the old man where the coats of the bladder probably are somewhat disorganized, I prefer lithotomy—here we have the safety valve. Even in these cases, however, where the stone is a new formation, I deviate sometimes. In one case, that of a lad aged sixteen, I undertook crushing, and finding the stone quite small I extracted it entire from the bladder, when it became impacted in the urethra; I cut down upon it just above the bulb, and turning the blades of the lithotrite through the incision, freed

the stone and withdrew the instrument. Again, where the stone is small, I deviate sometimes. I sounded a gentleman of this city, he was in advanced life; misled by a small stone that I engaged, I determined to employ lithotrity. The case terminated unfavorably, and at the autopsy I discovered five small stones in the bladder: one kidney was much disintegrated and the other was undergoing suppurative change. Of course, in this instance, death was unavoidable.

Where the bladder is much thickened and extremely sensitive, or where the stone is large and very hard, I cut without reference to age. Here is a very large stone that I cut from a youth sixteen years of age in this house four years ago; this tongue laid above the bulb. I could not introduce the staff between the stone and the urethra, but cut down directly upon the stone, broke it up and removed it; it occupied the prostatic, membranous and bulbous portions of the urethra. The boy had been suffering for many years not only from the stone but from the cruelty of his father and step-mother, who finally sent him to the Police Court and appeared against him, testifying that he was incorrigibly bad; that he had masturbated for years continually, and they begged to have him sent to the House of Correction; but the good judge did him the justice to send him to the hospital, where it was proved that the "continual masturbation" was simply a continued effort to find relief from the agony which the stone caused the poor fellow.

A year after this operation the patient was operated upon for stricture of the urethra, and there has followed incontinence of urine—the only one of those whom I have been able to follow where such a condition supervened.

As there is in this boy a capacious urethra, I will now introduce the lithotrite. [After ineffectual attempts to grasp the stone, Dr. Mussey said]: Gentlemen, this stone is too large for my instrument, I will cut. Observe, I introduce the index finger of my left hand into the rectum, to note the relations of the perineum to the prostate and to guard against injury to the bowel. My left index finger is now in the bladder; passing the forceps along it, I seize the stone and retract with a rocking motion. An unfavorable presentation, evidently; I change the axis. I ask the house physician for a bistoury and will divide the prostate further. Here is the stone. It has a long diameter of one and three-eighths inches, a second diameter of one inch and a short diameter of



thirteen-sixteenths of one inch. It weighs two hundred and ten grains.

[This patient made an uninterrupted recovery. The catheter was withdrawn forty hours after the operation. On the fifth day the urine began to pass through the natural channel. On the eighth day but little urine escaped through the incision, and then only when the patient made the effort to void the bladder. On the ninth day no urine escaped involuntarily. On the sixteenth, he was dressed and ward, and on the twentieth day he was discharged well.]

[The bowels acted spontaneously on the third day after the operation.]

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### *Hemiplegia.*

Service of Dr. J. F. WHITE. Reported by Dr. R. F. ERDMANN, Resident Physician.

GENTLEMEN: A few days ago I directed your attention to a case of facial paralysis. This morning I wish you to observe in the patient before you paralysis in another locality. There is nothing wrong in this man's face. The muscles perform their functions; but direct your eyes to his left arm; note the great difficulty he manifests in raising it even to a moderate extent. Observe the flexion of his fingers, his incapability of extending them, and the requirement on my part of considerable force to open his hand. Regard also the resistance of the flexors when I attempt to extend the forearm! Evidently there is something "out of gear." Look at the arm as it hangs by his side, it presents the appearance of powerlessness! He has no confidence in it, and never calls it to duty! Observe now the leg of the same side. You see a peculiarity in his gait. In the language of Dr. Erdmann, resident physician, who has furnished me a well drawn up history of the case: "When the patient walks he drags his left leg, the whole limb is thrown outward and brought forward with a curve, thus performing circumduction." Without going further into detail I wish to call your attention to the difference of the manner of using the leg in a patient of this kind and one affected with so-called hysterical paralysis. In the latter "she

drags the palsied limb after her, as if it were a piece of inanimate matter, and uses no act of circumduction, nor effort of any kind to lift it from the ground; the foot sweeps the ground as she walks."

Let us now listen to the history of the case, which Dr. Erdmann will please read.

Charles McC—, æt. 48, laborer, dates the beginning of his ill health to about a year ago, when he was seized with oppressive drowsiness, rendering him unfit for physical or mental exertion. Sleep was his only and irresistible desire! He also suffered occasionally from headache and vertigo. About the same time a profuse clammy sweat, chiefly confined to the left side of his body was developed, frequently in large cold drops! About eight months ago his attention was directed to his face which was distorted, with the angle of the mouth drawn to the left side; and the next day he found he was partially paralyzed in the left arm and leg. For some days he could not maintain an upright position! In a few days the symmetry of the face was restored, and in about six days, with the assistance of a cane, the patient was able to walk about! No improvement in the left arm. At no time unconscious." I have already directed your attention to certain "outward and visible signs." You can readily see that he is a man of medium stature, somewhat anæmic and "in not very good flesh." I wish you also to notice his nose, by no means small, and occupied to a large extent by acne rosacea. Unclothing the right arm brings into view, just above the elbow, a well marked specimen of the out-cropping of rupia. On the shoulder and arm of the left side you see several large cicatrices, the result of just the same development observed on the right arm. Sensation of affected limbs normal, as ascertained by experiment. Reflex action is readily excited by tickling the soles of his feet.

So much for sight! We learn from the patient that three years ago he was chancered!

Now, gentlemen, we have ascertained that our patient is afflicted with a form of paralysis known by the name of Hemiplegia. Remember that paralysis is not a disease of itself: "it is not a disease, but a symptom of a disease. It is an effect due to a cause. What then are the causes which may give rise to paralysis? In the words of Dr. Todd, they are either an affection of the nerve or nerves, whose power is destroyed, in some part of their course, or a morbid state of the center in which the nerve or nerves are im-

planted, or with which they may be less directly connected. The nervous trunks themselves may be impaired in their nutrition, the center being healthy, or they may have suffered some mechanical injury from violence or pressure; thus, either they become imperfect conductors of the nervous force, or they are rendered altogether incapable of propagating it; or some portion of the center of volition is the seat of a morbid process, whereby the influence of the will over certain parts is suspended, and thus the nerves of those parts receive no impulse at all from that center, whether mental or physical; and although perfectly healthy in themselves, are incapable of taking part in voluntary acts."

Time will not permit us to take a wide range in the discussion of this subject. In the case before us we believe some portion of the center of volition is the seat of a morbid process. Lesions of the corpora striata and optichalami are most apt to produce hemiplegia, one of the most frequent causes is sanguineous effusion. Recent pathological investigations have led to the association of an atheromatous condition of the cerebral arteries with this effusion. Without detailing the steps of this retrograde change in the arterial walls, I remark that while the effect is to dilate the larger arteries, contraction takes place in the smaller.

Let us now suppose that an artery, supplying some portion of the brain, has undergone the change referred to. The vessel will at first undergo contraction, and if the pathological process continues to the formation of a thrombus, it is finally closed, and partial anæmia of the brain is the result; if now collateral circulation fails to be established (which will be the case if the artery is given off above the circle of Willis), the part deprived of its nutrition dies, and undergoes softening.

You will perhaps expect to find marked manifestations of a lesion producing partial death if so important an organ as the brain, but authorities assert that the whole of one hemisphere may be destroyed without producing any marked functional disturbance. Partial necrosis, which generally involves the medullary portion of the hemisphere, only produces some general symptoms. The patient will complain of headache, vertigo, he is inclined to sleep a great deal, is indifferent and apathetic, phenomena which we find recorded in the history of the patient. These symptoms will undergo no change so long as the diseased condition (necrosis) remains uncomplicated, but this condition can not exist for any



length of time without producing other changes, and others give rise to other symptoms.

The change most likely to occur is the formation of collateral œdema, which is sooner or later established around a diseased spot in the brain tissue. The pressure produced by this condition empties all the capillaries and arterioles of the parts affected, giving rise to extensive anæmia, which if the base, especially the centers of volition, become involved, results in gradual hemiplegia, but its approach is slow. How then are we to account for the abruptness with which the paralysis set in with this patient?

To explain this matter I am compelled to direct your attention once more to the condition of the arteries, producing, as I have attempted to explain, partial necrosis of the brain. Atheroma begins with a deposition of fat in the walls of the arteries, *i. e.*, it is essentially a fatty degeneration. Now it may be the case, that one or more arteries present all the different stages of this degeneration, so that in one place a thrombus may produce an entire occlusion of the artery, while at another place its walls may have undergone the fatty change, become weakened, and offer no resistance to the impulse of the blood. If at this point the patient is imprudent enough to indulge in any unwonted mental or physical exertion, the heart's action becomes excited, the impulse augmented, and the blood is propelled with greater force, the arterial walls, unable to overcome the extra tension, rupture, cerebral hemorrhage, and if the blood is effused into the centers of volition, sudden hemiplegia, is the result. You have already observed that I have traced all these changes ultimately to an atheromatous degeneration of the cerebral arteries, but what proof have we that such a condition is existing? None positive, it is true, but we can approximate the truth by carefully weighing the facts presented to us in this case, such facts as the age of the patient, for atheroma occurs exclusively in old age; further, that apoplexy can generally be traced to this condition of the arteries, and finally, that atheroma, according to Rokitański, solely originates in a blood-crisis. This crisis has no doubt existed, and still exists, in this patient as a consequence of syphilis, whose evil effects are not only limited to the blood, but scarcely any tissue is spared from its fearful ravages. The patient denies the existence of any eruption, but *rupia* as it is presented to us by this isolated evidence, and which is at the present time considered as pathognomonic of syphilis, convince me that he is thoroughly saturated

with its poison. I have now accounted for the suspected existence of atheroma, which at first gave rise to partial anæmia, necrosis, and softening of the brain, subsequently to cerebral hemorrhage and hemiplegia, and now one more phenomena remains to be explained, I refer to the rigid condition of the muscles. You observe how the fingers are flexed on the palm, the forearm on the arm, and the contracted condition of the ham-string muscles. Immediately after the attack the muscles were relaxed and entirely void of action, this contraction came on gradually and not for some time after the attack; early rigidity would have been proof of irritation, late rigidity as it occurred in this case ensues from loss of brain substance produced by the absorption of the clot and subsequent cicatrization of the lacerated brain tissue.

Having accounted for the diagnosis and all the existing phenomena connected with the case, I will now consider the treatment. The question at once arises, can we do anything for the central lesion? We can not! All that remains is the regulation of the secretory and excretory functions, and warn the patient against any excessive exertion, as it may produce a renewed attack of cerebral hemorrhage, and sooner than necessary end the patient's life. Electricity is recommended as a stimulus to the wasted and ill-nourished muscles. It affords at least some compensation for the lost nervous force. I have tried iodide of potash in this case, with a view of combating the syphilitic element, but without, so far, any evident success.

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**Carbolic Acid.** Dr. Caniff, Professor of Surgery, Toronto, Canada, in a paper recently read before the Canadian Institute on the merits of carbolic acid, submits that if Mr. Lister would still further dilute the antiseptic lotion until the amount of carbolic acid was infinitesimal, but continue to apply the *wash*, he will find even greater success. Dr. Caniff asserts that it is the *washing* that does good.—*Canada Medical Journal*.

## Medical Societies.

## CINCINNATI ACADEMY OF MEDICINE.

WM. CARSON, M. D., PRES'T.

J. T. WHITTAKER, M. D., SEC'Y.

*In the matter of newspaper reports of the proceedings of this Academy, the following action was had :*

*Dr. Unzicker* moved that reporters of the public press be invited to attend and report the proceedings.

*Dr. McIlvaine* called attention to the fact that publicity of its proceedings was to have been one of the cardinal points of its organization. In its early history a paper by Dr. Lawson was published; afterward a law was passed excluding reporters. Having recently noticed a case in the papers he had supposed that the original status had been resumed.

*Dr. Thornton* remarks that the report in the paper is an exact copy of the minutes.

*The Secretary* disavows any connection with its publication.

*Dr. Ludlow* is opposed to public reports on the liability of misrepresentation, and on account of the exposure of cases which follows.

*Dr. Dawson* is decidedly opposed to the motion. The reasons urged by Dr. Ludlow are sufficient objections. There are many things which might appear well on public record; many would appear ridiculous. The Academy was organized for cultivation, not for advertisement.

*Dr. Unzicker* said he only presented the motion to test the sentiment of the Academy. According to general opinion the society had been disgraced by the recent publications. The medical journals are our proper medium. He was himself opposed to the motion.

*Dr. Thornton* states that if he is correctly informed, the first article was taken from a private circular printed by the gentleman who had reported the case. The second, in all probability, was furnished by the other side, which also desired representation.



*Dr. Dawson* considers our discussions here are of the nature of a consultation, and are of the same sacredness. The public has no more right to the one than the other.

*Dr. Juler* felt it his duty to express his opinion in full. He was pained at the publicity which had been recently made, whereby names had been paraded in the pages of a scurrilous press. It was a violation of confidence. Medicine is a profession, and not a trade.

*Dr. Graham* has always been sensitive on publications, on the ground of misrepresentations. When mistakes occur in the medical journals, what could be expected from newspaper articles? Papers are occasionally presented whose character, ability, and value, might be of service to the public. The questions usually discussed here are those of greatest difficulty and often disagreement. The public could not discriminate in these cases, and the influence would be bad and the effect damaging. The motive of journalists is not a laudable one. In this instance he is informed, on good authority, that the first paper was surreptitiously seized to provoke a doctor's quarrel. If an officer of the Academy were instructed to insert a scientific paper, the full price of an advertisement would be demanded. It is the animosities and personalities which newspaper editors desire.

The motion was put and lost.

*Starch Bodies in the Urine.* *Dr. Carson* remarks upon these bodies found in the urine (shown to the Academy under one of the microscopes): They are interesting from their extreme rarity. Their character was unmistakable from their concentric lamellæ. The peculiar reaction to iodine is also present; they behave like starch cells under the polarizer. *Dr. Miller*, who furnished the specimen, is satisfied that no deception had been practiced. If they are from the kidney, they could only be corpora amylacea, such as are found in the brain and spinal cord, and sometimes in the blood of epileptics. A German pathologist has met them in the extravasated blood of phthisis; *Bennett*, of Edinburg, in pigeons. *Braun*, of Vienna, regards their presence as of valuable diagnostic importance in amyloid kidneys. Another specimen (shown to the Academy under another microscope) was a section of an amyloid kidney showing the characteristic reaction of iodine. It was from a patient with anal fistula in the hospital, who had suffered from suppurative inflammation for two years. This con-

dition of suppurative inflammation is unusually productive of this degeneration. The liver in this case measured twelve inches in the transverse diameter; weight, ten and a half pounds. It was dense, grayish waxy in appearance. The first iodine test yielded no reaction; it became evident, however, on their section. The French test formed by the addition of sulphuric acid to iodine, which displays a blue color when applied to waxy organs, failed in this case. Dickinson claims, however, that the simple iodine test showing the mahogany color is sufficient.

*Dr. Mackenzie* remarks upon the rarity of starch bodies in the urine, regarding it as extremely improbable that they originate in the kidneys. He quotes from several recent writers on the urine in proof. He moved that it be referred to the Section on Urinary Diseases.

*Accident, with Fracture of Base of the Skull, etc.* Dr. Dawson said he had an interesting case to report, and had a still more interesting specimen to exhibit, but unfortunately lost it. Last Wednesday, a German and his wife were thrown from a buggy on a hill side, both striking the back of the head. The accident occurred at 5 P. M.; the woman died at 10 P. M. The man was seen in consultation at 11. He was then suffering from some of the symptoms of compression of the brain. There was no paralysis; the pupils insensible and dilated; hemorrhage from the ear; skin cold; intellect null; no vision or hearing; the pulse over 100, feeble, rather that of concussion. There was a small wound over the right eye, also a small one posteriorly marking the depression; this depression was trephined and elevated. Operation at 12, midnight. After the operation the patient sank for a time, the respiration becoming puffy, not stertorous. On Thursday evening he was much improved; asked to pass his water. This improvement continued until 5 P. M. on Saturday, when retrogression commenced, though seventy-two hours after the operation he responded to questions. During the night respiration became labored; skin cool; pulse sunk from 120 to 100; death, Sunday morning.

*On autopsy*, a large semi-organized clot was found between the dura mater and the skull, near the middle meningeal artery; signs of inflammation in the sinus between the hemispheres; effusion in the sub-arachnoid. At the base of the middle lobe, a fracture, one and a half inches long. At this point the brain was

less engorged. The fracture of the skull extended through the petrous portion of the temporal bone. By a singular coincidence the woman was wounded on the same side, and had hemorrhage from the same ear.

*Dr. Juler* inquires as to the color and character of the discharge from the ear.

*Dr. Dawson* answers that it was sanguineous and profuse throughout; and in response to an inquiry from *Dr. Connor*, the fracture of the petrous portion was close to the parietal angle.

*Absence of Vagina.* *Dr. Mussey* related a case operated upon by *Dr. Emmett*, of New York, of congenital absence of the vagina. Incisions were made, and the tube maintained patulous by glass bougies. There were no internal organs of generation. He could not state as to the existence of sexual desire. In answer to *Dr. Ludlow*, there were no external organs. *Dr. M.* also remarked that he witnessed an operation for vesico-vaginal fistula by *Dr. Emmett*, with decided improvements over old forms.

*Dr. Carroll* has seen two or three cases of atresia vagina in the adult female at labor, whereby the head was detained as long as three days. In one case (non-puerperal), he had endeavored to secure an opening for the menses; during the night it opened spontaneously; catheters and bougies secured it; when labor ensued, passage of the head was at first prevented. Before he had returned to apply the forceps, delivery was effected.

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*Twenty-Fifth Annual Meeting of the Ohio State Medical Society,*

*Held at Cleveland, June 14, 15 and 16, 1870.*

FIRST DAY.

Society met at Case Hall. Called to order by President S. M. Smith, of Columbus, assisted by Vice President S. S. Scoville, of Lebanon. The Secretaries, Drs. Hall and Hyatt, and Treasurer, Dr. Thompson, were present. Opened with prayer by Rev. Dr. Goodrich.

*Dr. H. J. Herrick*, Chairman of the Executive Committee, made



his report announcing the arrangements for the Society, and the programme for the entertainment of the members.

Dr. C. A. Terry then proceeded to deliver an address of welcome on behalf of the profession of Cleveland.

After filling up the vacancies in the several standing committees, the Treasurer proceeded to read his annual report, which was, on motion, referred to the Finance Committee.

Dr. Firestone, from the Committee on Medical Societies, reported favorably upon the admission as auxiliaries of the Delamater Medical Society and the Fulton County Medical Society, and that their delegates be admitted to seats in the Society. Report adopted.

Dr. W. B. Davis, Chairman of the Committee on Admissions, introduced to the Society Dr. E. D. Safford, a delegate from the State Society of West Virginia. He was welcomed by the President, and responded in a neat and pertinent address.

The President announced an invitation from Dr. Cleveland to visit the Charity Hospital at the convenience of the Society. On motion, the invitation was accepted.

Dr. Hall, of the Publishing Committee, reported that 450 copies of the Transactions had been printed, at a cost of \$180. Report adopted.

On call of the Special Committees, papers were announced in readiness from Dr. Beeman, Climatology, etc., of South-Eastern Kansas; Dr. Connor, on Carbolic Acid; Dr. Stevens, on Obituaries; Dr. Hyatt, on Hæmatics; and Dr. Davis, on Vaccination. Dr. Gay was continued until next year, and his topic changed to Sanitary Condition of Prisons, Hospitals, etc.

Dr. Stevens announced a paper from Dr. Conklin on the Thermometer in certain Nervous Diseases, instead of a report on Bright's Diseases.

Dr. P. S. Connor then read his paper on *Surgical Applications of Carbolic Acid*. It was listened to with interest, and, on motion, referred to Publishing Committee, with instructions to print; pending the motion, the paper was discussed at length by Drs. Mussey, Safford, Dunlap, Davis, Connor, Matchett, Gay, and Reed, the remarks extending into the afternoon session.

*Afternoon.*

Dr. Beeman read an interesting account of the *Climatology and Diseases of South-Eastern Kansas*. Referred to the Publishing Committee to print.

The Chairman of the Executive Committee presented an invitation for the evening to a concert and military drill at the Rink. Accepted. Also, to visit the Newburg Lunatic Asylum and the Steel Works to-morrow afternoon and evening. Accepted.

Dr. Landon moved the following special order for Wednesday morning: 1. Election of officers at 8½ o'clock; 2. Exercises in celebration of the twenty-fifth anniversary; 3d. Valedictory address of the retiring President; and that the citizens, including ladies of the city, be invited to attend; to which was added, on motion of Dr. Davis, that the Society then proceed with the Special Committees in regular order.

Dr. Livingston was introduced as a delegate from the State of Pennsylvania, and was welcomed by the President, and made an appropriate response.

Dr. O. G. Seldon, as Chairman of the Committee appointed last year to memorialize the Legislature on the subject of Dissections, made a report of the operations of the Committee and the results. The report was adopted, and the expenses of the Committee were ordered to be paid.

Dr. O. G. Seldon read a paper on *Pneumonia*, which was received and ordered to be placed on file; subsequently ordered to be printed.

The Committee on Medical Societies reported on the application of the Association of North-Eastern Ohio, and recommended that they be made auxiliary to the State Society.

During the day a large number of gentlemen were duly reported upon by the Committee on Admissions, and respectively admitted to membership.

#### SECOND DAY.

The President, Dr. Smith, in the chair. Opened with prayer by Rev. Dr. Johnson. Reading of minutes of yesterday dispensed with.

The Secretary, Dr. Hall, introduced Dr. Geo. W. Bradford as a delegate from the New York State Society. He was received in the usual manner, and invited to a seat with the Society.

The Society then proceeded to the regular order of the day, the election of officers. Drs. Landon, Drury, Buckingham, and Bramble, were appointed tellers, and the election resulted as follows:

*President*—Thad. A. Reamy, of Zanesville.

*Vice Presidents*—H. J. Herrick, Cleveland; J. C. Brown, Urbana; Thos. McEbright, Akron; D. D. Bramble, Cincinnati.

*Secretary*—W. C. Hall, Fayetteville.

*Assistant Secretary*—E. H. Hyatt, Delaware.

*Committee on Admissions*—Drs. W. B. Davis, C. P. Landon, Pierce, T. G. Cleveland, J. S. McNeeley.

Dr. M. Dawson, of Lancaster, asked leave to withdraw from the Society. Granted.

The Finance Committee reported as follows :

That they have examined the books and vouchers of the Treasurer, Dr. J. B. Thompson, and find them correct, as follows :

Balance on hand at last report.....	\$171 48
Receipts from initiations and dues.....	549 00
	<hr/>
	\$720 48
Total expended as per vouchers.....	413 49
	<hr/>
Leaving now on hand.....	\$306 99

We further recommend that the Treasurer receive one hundred and fifty dollars and the Secretary fifty dollars for the current year, as salaries. We further recommend that the Transactions for the current year be bound in cloth, and further advise that the assessment for the current year be two dollars.

B. F. HART,	} Committee on Finance.
J. C. BROWN,	
W. H. DRURY,	
O. G. SELDON,	
C. P. LANDON,	

The assessment was amended to one dollar instead of two, and the report was then adopted.

The "*Silver Wedding*" exercises, in honor of the Society's twenty-fifth anniversary, were next in order: Dr. E. B. Stevens, of Cincinnati, delivered a *Historical Review* of medical associations in Ohio, which was very complete and listened to with attention. On motion the address was referred to the Publishing Committee with instructions to print.

Dr. Firestone read a poem, prepared for the occasion by Dr. J. M. Brown, of Cincinnati, entitled the *Physician's Calling*, which was also ordered to be printed with the Transactions.

Half an hour was then spent in an interchange of reminiscences of the past. Interesting remarks were made by Drs. Russell,



Thompson, and others, making the occasion one of great interest, and long to be remembered by the Society.

The retiring President, Dr. S. M. Smith, then delivered his valedictory address, which was, on motion, referred to the Publishing Committee and ordered to be embraced in the Transactions.

#### AFTERNOON SESSION.

President Reamy in the chair.

Dr. W. B. Davis read his paper on *Vaccination*, at the close of which he offered the following resolutions, which were adopted :

*Resolved*, That the Ohio State Medical Society appoint a committee, to consist of five members, and one corresponding member from each county in the State, to prepare and present a memorial to the Ohio Legislature, praying for the enactment of a law which will require all pupils of the public schools and other educational institutions, supported in whole or in part by State or county tax, and all inmates of asylums, hospitals, reform and correctional schools, work-houses, jails, penitentiaries, etc., supported at public expense, to be vaccinated upon admission to the several establishments, unless satisfactory evidence is furnished to a competent inspecting physician that the parties are fully protected by a previous vaccination.

*Resolved*, That it be made the duty of boards of health, where they exist, and county commissioners where they do not, to appoint a qualified medical officer, who shall semi-annually inspect the pupils of public and other State schools, and furnish a certificate of vaccination to those who are fully protected, and gratuitously vaccinate those who are not; and no pupil shall be allowed to continue in said schools who has not received a certificate of vaccination. The several boards having control of the State or county charitable, reformatory or correctional institutions, shall each appoint a qualified judicial officer, who shall vaccinate all the inmates of said institutions, without respect to any previous vaccination; and all persons admitted thereafter shall be vaccinated immediately upon their admission, but such persons as are confined for a term of years or for life, shall be re-vaccinated every five years.

*Resolved*, Further, that the Legislature be petitioned by the same committee to pass a law requiring all cities of the first class to establish and support vaccine establishments for the purpose of cultivating and having constantly on hand reliable vaccine virus.

*Resolved*, Further, that the Legislature be petitioned to make it a penal offense for any person but regularly educated physicians to perform the operation of vaccination.

The paper of Dr. Davis was ordered to be printed with the Transactions.

On motion of Dr. Landon, a vote of thanks was tendered the retiring officers; to Dr. Stevens for his *Historical Review*, and Dr. Brown for his poem.

*Next meeting*.—On motion of Dr. E. B. Stevens, Cincinnati was selected as the place of meeting for 1871, and the Executive Committee were allowed discretionary power as to the time of calling the meeting, with a view to securing an arrangement for the meeting of the Kentucky State Society at Covington at the same time with the meeting of this society at Cincinnati.

On motion of Dr. Thompson, as amended by Dr. Hall, the Publishing Committee was directed to have Constitution, By-laws and Ethics included with this year's Transactions; also, five hundred extra copies of Constitution, By-laws and Code in separate form, and the corrected list of members with the Transactions.

At 3.15 P. M. the Society adjourned to visit the Bessemer Steel Works, at Newberg. The process was exhibited to the visitors in detail, each physician taking away with him a specimen of "*speigle*."

From the steel works the Society went to rolling mill, where steel rails are manufactured.

The evening was spent at the Northern Lunatic Asylum, and the members were shown through the wards by Drs. Stewart and Hobson—which were pronounced to be in perfect order. An elegant supper was provided for the visitors, and Drs. Reamy, Russell, and others expressed the thanks of the Society for the entertainment in pertinent speeches. A large number of additional members were elected during the day.

#### THIRD DAY—MORNING SESSION.

Dr. Reamy, President, in the Chair. On report of the Committee on Medical Societies, the Cleveland Academy of Medicine was made auxiliary.

The Secretary presented the resolutions of the American Medical Association, at New Orleans, in 1869, in regard to medical education. The resolutions were referred to Drs. Jones, Corson, Stockstill, Ball, and Harrison, who subsequently reported in favor

of *laying over* the resolutions of 1869, and suggest as a substitute—resolutions indorsing the integrity of the teachers of our State—urging upon them renewed vigilance—and proposing that it be deemed a violation of good faith calling for Society discipline to admit students to the office study of medicine without a satisfactory preliminary examination. Finally, that this whole subject be referred to a special committee for report in 1871. Adopted.

Dr. J. R. Black read a volunteer paper on the importance of a Concerted Account of Prevailing Diseases, and their Management, throughout the State. Ordered to be printed.

Dr. Conklin's volunteer paper was referred to the Committee on Publication, with discretionary power.

Dr. McBride read a volunteer paper on the *Specific Action of Cantharides*. Ordered to be printed.

Dr. Grey reported his visit to Indiana State Society, and his courteous reception.

The Finance Committee reported Expenses of Secretary to the amount of \$32, which was ordered paid.

*Trip on the Lake*.—The members and their wives then took a Steamboat Excursion to Rocky river. After a pleasant trip the Society assembled at the Cliff House, where the concluding business was transacted and the committees announced.

Dr. P. Barron of Ravenna, and Dr. E. D. Safford of Virginia, were elected honorary members.

The President announced the following :

#### STANDING COMMITTEES.

*Executive*—E. B. Stevens, W. W. Dawson, P. S. Connor, W. B. Davis, A. J. Miles, G. A. Doherty.

*Publication*—W. C. Hall, J. B. Thompson, J. M. Wheaton, W. Drury.

*Finance*—W. H. Matchett, W. H. Mussey, T. B. Williams, L. T. Pease, Sharp.

*Medical Societies*—E. Buckingham, S. S. Grey, O. G. Seldon.

#### SPECIAL COMMITTEES.

*S. M. Smith*—Plea of Insanity in Cases of Homicide.

*W. J. Scott*—Practice of Medicine.

*E. B. Stevens*—Uterine Catarrh.

*P. S. Connor*—Hernia Cerebri.

*S. S. Scoville*—Physical and Vital Force.



*J. A. Little*—Antagonistic Power of Opium and Belladonna.

*D. D. Bramble*—Hydrate of Cloral.

*O. G. Seldon*—Chorea.

*J. B. Hough*—(continued) New Anæsthetics.

*R. Wirth* " Diseases of Larynx.

*Pomerine* " Puerperal Convulsions.

*W. H. Mussey* " Improvements in Surgery.

*N. Gay* " Sanitary Condition of Prisons, Hos-

pitals, Asylums.

*J. R. Black*—Sanitary Science.

*John Davis*—(Cincinnati) Disinfection and Disinfectants.

*J. W. Hamilton*—Diseases of the Eye.

*Diseases and Causes in each County*—Black, Thornton, Herrick, Culbertson, Smith.

*Special Committee on Vaccination*—W. B. Davis, J. W. Hamilton, S. M. Smith, S. Loving, C. P. Landon, W. W. Dawson.

*Delegates to Kentucky State Medical Society*—Chas. Woodward, A. S. Dandridge, S. Loving.

Delegates to various other State Societies were appointed, and to the American Association for 1871.

On motion adjourned.

THAD. A. REAMY, *President.*

W. C. HALE, }  
E. H. HYATT, } *Secretaries.*

### *First Meeting of the North-Eastern Indiana Medical Society.*

Pursuant to a call for the purpose of organizing a Medical Society to embrace the counties of LaGrange, Steuben, Noble, and DeKalb, the following named physicians met on Wednesday, June 15, at the parlor of the Tremont House, Kendallville, Ind :

Drs. Denny, Carr, Crum, Palmiter, Randall, Landon, Ligonier; Franks, Adair, Brimfield; Fansler, Rome City; Ward, Wawaka; Denny, Hawpatch; Wood, Angola; Dancer, South Milford; Wright, Avilla; Vincent, Abell, Williams, Gilbert, Kendallville.

After reading the minutes of the preliminary meeting, held May 20, 1870, the committee on permanent organization, consist-

ing of Drs. Denny, Franks, and Palmiter, reported the following officers who were promptly elected :

President, O. J. Vincent ; Vice Presidents, Wood, Dancer, Stough, Palmiter ; Secretary, J. L. Gilbert ; Corresponding Secretary, D. W. Crum ; Treasurer, L. F. Abell ; Censors, Drs. Carr, Williams, Franks, Denny, Landon.

On motion, the Chair appointed Drs. Denny, Wood, and Crum, to prepare a constitution and by-laws. They reported immediately, and a constitution and by-laws were adopted, of which the Secretary was ordered to have one hundred copies printed.

A fee bill was then adopted, and two hundred copies ordered to be printed in card form.

The following resolutions were adopted, and ordered to be published in the papers of the counties of Steuben, LaGrange, DeKalb and Noble.

*Resolved*, That all who dishonestly or maliciously refuse to pay their doctor bills be reported to this society.

*Resolved*, That no member of this society shall furnish medical aid, except in extreme cases, to persons thus reported, until they have paid their former doctor bills, unless they pay a double fee in advance.

*Resolved*, That the honest poor are always the proper subjects for our sympathy.

The code of ethics of the American Medical Association was adopted.

On motion, Drs. Landon and Wood were requested to prepare essays to be read at the next meeting.

Scarlatina and Diphtheria were selected as subjects for discussion at the next meeting.

On motion, the Secretary was ordered to publish the proceedings of this meeting in the journals of the four counties named above, and in the medical journals of Chicago and Cincinnati.

The society then adjourned to meet at Waterloo, on the first Tuesday of September next.

O. J. VINCENT, *President*.

J. L. GILBERT, *Secretary*.

## Correspondence.

*Moninquiró, July 1870.*

EDITORS LANCET AND OBSERVER :—Article III of your July inst. number is a succinct account of an extraordinary congenital malformation, by W. Dickey, M. D.

One can not but feel that science stands shorn of a part of its reasonable demands by the brevity of the report, and as Dr. Dickey's address is not given, I beg you will allow me space in your valuable journal to propound to him a few inquiries in the interest of science.

1. When did the patient die? during the examination of her lungs in September, 1868?

2. "Autopsy, 12 hours after death." "Permission was given to make the examination but a short time before the hour appointed for burial." Why was the burial so soon as 12 hours after demise?

3. "Strong cardiac impulses were heard on the right side; so strong that its impulse indicated a hypertrophy, or at least an aneurismal heart." How many impulses were heard and at what part of right side, near the sternum, beside the spine, at the exterior angle of the scapula? and what is the average strength of the impulse of an aneurismal heart?

4. "Configuration of chest; general appearance contracted." "Lung in left side somewhat larger than usual." How was the extra size of the lung accommodated in the contracted chest; did it protrude through the ribs?

5. "No lung on the right side, not even a sediment at the bifurcation." Which bifurcation, of the aorta or of the body? was there a sinus, fistula, or other communication leading from the thorax to the bifurcation? what kind of sediment was expected, and did they look for it in an abnormal sack or did the subject wear a diaper?

6. "Between the largest of pleura the space was clean and beautiful." Had this space been recently scrubbed? was the beautiful found in the perspective, the coloring or the architectural arrangement? and what was the appearance of affairs in the space between the smallest pleura?

A company of other questions crowd themselves forward for presentation, but as they are affairs of curiosity rather than matters of science, I do not insert them.

PHIL. DUBITO.



## Editorial.

“*Dirigo.*” We think it very unfortunate when a man of the culture and ability of Prof. D. W. Yandall deems it his duty to exert his influence in a wrong direction. His speech before the convention of teachers at Washington, and his remarks upon the general subject of medical education in the association subsequently, we think are mischievous in their tendency. Dr. Yandall has the power of controlling assemblages; he has personal magnetism, and he loves to use this power. In the present instance, without intending it, we are sure, he has advanced the interests of those who would *cheapen* the doctorate. His speech will be quoted to that end. Men who *direct* professional thought must be careful of their powers, that they be not misconstrued. Had a few men of the influence of Dr. Yandall so willed it, at Washington, the just expectations of the profession in regard to systematizing the plans of teaching in this country, and establishing its just compensation, might have been carried forward to a wise and satisfactory basis.

In this connection we must not omit to acknowledge that the editor of the Baltimore *Bulletin* gave us a “palpable hit” some time ago. We were “verdant enough” to believe the American Association had power and were now educated up to taking the initiative in this matter. But we also take pleasure in reminding the *Bulletin* that our record is clean; if we attempted to *direct*, our words were in support; we threw no cold water on hope. We did not by anticipation in any wise prostrate the effort. Can the *Bulletin* say as much?

In the April number of this journal, we expressed our views in full on the subject of education, and what we believe the American Association might and should do in the premises. The views then expressed we still entertain; we do not care now to repeat them. They are essentially the views of the gentlemen of the Miami College with whom we are associated; we believe them to represent the opinions of a large number of the profession interested in teaching; but we now confess that we regard the whole matter very much thrown out at sea again.

So, too, in the matter of *fees*. In the article already alluded to, we proposed one hundred dollars as a fair compensation for a course of lectures in this interior valley; but in the strife for success, it will now be seen that most of the colleges in the West will run down much below that. For some years the *Miami College* has maintained sixty dollars as the fee, and that under protest as too low. Still, it was the highest rate charged in the territory tributary to Cincinnati—higher than most of the schools. She now announces her fee at forty dollars, and we suppose will retain that figure until the schools of the West agree to some unity of action in the matter. The Medical College of Ohio takes the same position, but is also ready to unite on one hundred dollars, under a just and equitable general educational system.

***The American Medical Association.*** Criticisms of rather an adverse sort have been so made the order of the day that we give place to the following of a semi-apologetic character, hoping it may set us to thinking:

“On reviewing the brief but severe strictures, open and covert, upon the proceedings of the American Medical Association at its recent meeting in Washington contained in several numbers of the *Journal*, I can not avoid the conclusion that the exponent of medical ideas in Massachusetts is infected with the prevailing misconception as to the position and action of that body with reference to the unhappy controversy between the Medical Society of the District of Columbia and the “National Medical Society of the District,” so called.

The fairness and impartiality uniformly evinced by the editors of the *Journal* toward those who differ from them in opinion, afford the assurance that statements intended to vindicate the honor of the Association, and remove the unjust aspersions that have been showered upon it, will, provided they are made in the proper spirit, meet with a cordial reception from the organ of the medical profession in New England. I feel emboldened, therefore, to offer the following explanatory remarks, with the request that their publication may not be unnecessarily delayed.

I shall begin by affirming several propositions, in which certain fundamental principles regulating the government of representative bodies in general, as well as the American Medical Association, are embraced, and, as it were, formularized. I shall afterward endeavor to apply, with logical precision, these principles to the

case in hand, with the expectation of proving the injustice done the Association by the press, both medical and secular, throughout the country.

The American Medical Association, then, is a representative body, composed of delegates annually elected or appointed by medical societies, colleges, or hospitals, affiliated with the Association through the adoption of its Code of Ethics, and therefore entitled to representation therein. Like other representative bodies, the Association is governed by a system of laws or rules, in this instance denominated its Code of Ethics.

Like other representative bodies, it can recognize or receive as members none but duly accredited representatives of organizations entitled to representation therein.

As happens in the case of other representative bodies, the seats of members of the Association are liable to be contested, or the attempt may be made to invalidate the credentials of persons claiming to be members thereof. In either event, *it becomes the duty of the Association to determine, in accordance with its existing laws or regulations, whether persons whose seats are contested, or whose credentials are disputed, are or are not entitled to membership therein.* However burdensome or invidious circumstances may render the discharge of this duty, nevertheless it is one which the Association can not refuse to perform without dishonor to itself and injustice to the parties whose rights are involved.

Now, on applying these simple, indeed almost self-evident propositions to the proceedings of the Association, is it not clear that that body could not refuse to consider the questions at issue between the Medical Society of the District of Columbia and the so-called "National Medical Society" of that District? That it could not refuse will, I think, be apparent from the following considerations.

The former of the above-mentioned societies, viz: the Medical Society of the District of Columbia, a numerous and highly respectable organization, deriving its charter from the Congress of the United States, and affiliated from the beginning with the National Association, had formally protested against the admission of delegates from the latter, that is, from the so-called "National Medical Society" of the District, on the ground that whereas the aforesaid Society had been organized in violation of the Code of Ethics of the Association, and that by its subsequent action it had constantly infringed the provisions of the code, therefore the



Society never had been and was not now affiliated with the Association, and consequently not entitled to representation therein.

These charges were of too serious a nature to be dismissed without investigation. The matter was accordingly referred to the Committee on Ethics. The members of the committee unfortunately disagreeing, a majority and minority report were presented, neither of which shed the necessary light upon the merits of the controversy; neither of which offered any substantial reasons for the action recommended therein. Thus the Association, as much in the dark as before, was reduced to the alternative of adopting at random one report or the other, or of granting a hearing to both sides. That it ultimately chose the latter was, in my judgment, very much to its credit. A patient and impartial investigation of all the evidence resulted in a verdict *against* the so-called National Medical Society of the District of Columbia, a verdict honorable to the Association because rendered with full knowledge of the facts and in accordance therewith—a verdict, moreover, “to all intents and purposes unanimous.” The question thus decided was a question of ethics, pure and simple, into which, despite the assertions to the contrary abounding in partisan newspapers or other publications under the control of fire-eating politicians, considerations of race or color did not and could not intrude.

In conclusion, therefore, I submit that no body of sensible men that could be convened in Christendom would have acted, or ought to have acted, otherwise than did in this instance the American Medical Association, confronted, as it was, with a question which it could not avoid deciding, and upon which it was bound by every consideration of justice and honor to render a decision in accordance, so to speak, “with the law and the evidence.”

Furthermore, I submit that it is in the nature of things impossible that a representative body of whatever description should not, occasionally at least, be called upon to adjudicate questions involving the eligibility to membership of persons claiming to be duly accredited thereto, and that in such cases it becomes the imperative duty of the organization to render a just and impartial decision in accordance with its existing rules or laws and the testimony presented. This is precisely what the American Medical Association did, and for so doing has it not been most unjustly assailed?”—*Dr. Sullivan, in Boston Journal.*

*The Gynecological Journal* of Boston has completed its second volume, January to July, 1870, and we are under obligations for a copy in elegant cloth binding. Price of the half year, thus bound, \$2.50. We are glad to believe this journal is contributing largely to an improved knowledge of the diseases of women.

*The old Boston Medical and Surgical Journal* enters upon its 83d volume with July. Dr. Francis H. Brown now sustains the editorial charge, and with honor.

*The University of Nashville*, Medical Department, has reduced its *Fees* to \$50.

*The American Chemist* is the title of a very excellent Monthly Journal, devoted to "Theoretical, Analytical and Technical Chemistry." It is published in New York by William Baldwin & Co., for \$5 a year. It enters on a new volume with the July No.

*Ohio State Medical Society.* The regular proceedings of our State Society proved so voluminous that we have taken the editorial privilege of materially condensing the Secretary's Report. Nothing is omitted, however, we think, of general interest. Members will of course procure the *full* report with the volume of Transactions.

*Mr. Schmidt*, Druggist, cor. of Main and Seventh, has received a small supply of vaccine matter in glass tubes—imported from Germany. Price \$1.25 each.

*Mr. O. F. Gordon* is extending his range of business. Some time since we observed that he was keeping quite a variety of surgical and obstetrical instruments. Recently we notice he has on hand a supply of chemical apparatus. He has the old corner, Eighth and Central avenue.

*Errata.* In Dr. Logan's article, on page 466, 10th line, second paragraph, for "would seem to tend," read, would *therefore* seem, etc. Page 471, for "as a thousand other bodies," read, as *thorns* and other *foreign* bodies. Middle line of same page, for "introducing," read *recommending*. Page 474, for "obtained," read, *attained*. In case 5, 2d line, for "expiration," read, *expiratory*.

Page 476, 5th line second paragraph, for "inflammatory actions," read *action*. Same page, case 10, for "intra thoracic tendencies," read, *tenderness*.

***A Location Wanted.*** A large number of responses were received in reply to the Card in July number. The letters have all been forwarded to the party interested, who will himself correspond with such persons as meet his wishes as to locality.

***Bills in last Number.*** A fair amount of remittances have come to hand; we are, however, anxious for a few more of the same sort. Some of our subscriptions begin in July, and in making out bills to such, we have uniformly added in the \$1.50 to end of the year, with the purpose of having our entries more uniform. Some of our friends seem not to understand the extra, and supposed we were taxing them extra; by reference to their bills they will see we have added the price of *half a year's* subscription and *carried forward* the date half a year.

***The Kentucky State Medical Society*** met at Bowling Green, April 5, and we have received a copy of the Transactions for this year, printed in the beautiful style of Robert Clarke & Co. The Transactions embrace the usual record of proceedings and the Annual Address of the President. The Committee apologize for the absence of means. This is not as it should be in a great state like Kentucky, and having so large a body of influential medical men. We regret also to notice that the meeting at Bowling Green was comparatively small in its attendance. The Society adjourns to meet in 1871 in our sister city of Covington. Accompanying the Transactions we have also received a copy of the Constitution and By-laws, which we have examined with interest, as being a model in its plan of organization.

***The Minnesota State Medical Society*** held its meeting for 1870 in February, at St. Paul, and welcomed by the President, Dr. Samuel Willey. It seems a State Society was formed in 1855, but for some reason was suffered to become defunct, consequently in 1869 a convention of the profession reorganized the Society, which to all appearances seems destined to the proper vigor and vitality; and we doubt not it will exert a most important influence over the professional character and unity of the state.



*The American Association in Georgia.*—We have received the report of Dr. Powell, to the Fulton Co. Georgia Society, of his observations at the late meeting at Washington. The report is somewhat lengthy, and is really a fair, temperate, synopsis of the proceedings, and contrasts somewhat with the wholesale denunciations of men and things and actions indulged in by some others who participated in the meeting.

In regard to the address of Dr. Mendenhall, the reports say: "The address of the President was very strong, original and practical. This address is striking in its heartfelt annunciations of the harmony and brotherly love prevailing and increasing in the profession at large, and especially among the members of the American Medical Association. It gratifies our hearts, when it tells of the noble part borne by members of the profession during the late civil war.

"It gratifies our pride in the intellect and the scientific attainments, now numbered in the profession, when it gives the catalogue of the writings of its professional men. This address announced the accomplishment of the great and most valuable truth that this American Association had the moral power to enforce its enactments upon the important questions claiming its attention from time to time. It discloses with great force and truth all the difficulties in the way of the elevation of the standard of professional education and professional progress."

So courteous a notice of the President's address is something in contrast with the "rattling round" of certain venomous paragraphs nearer home; and suggests to us to remark that the election of Dr. Mendenhall at New Orleans, was a spontaneous movement in which southern members took the most prominent part. The position was tendered to him by the unanimous choice of the committee on nominations of one from each state without solicitation by himself, his colleagues or his Cincinnati friends. Two years before his friends at home made what they deemed an honorable effort to promote him to the Presidency, and failed; at New Orleans, the movement originated in a sentiment entirely outside of personal or local friendships, and must be viewed as a handsome, unsolicited compliment.

*Contributors*—not only for the *Lancet and Observer*, but for all publications—will not be amiss to take the following anecdote of Rev. Dr. Prime to their hearts—which we find in that capital magazine for children, the *Little Corporal*:

"When he was a young man he wrote his first article for publication. He carried it to an editor, who read it and pronounced it very good. 'But,' said he, 'don't you think you could condense it into half the space without leaving out any of the thoughts?' Mr. P. took the manuscript, and next day returned it, condensed as desired. 'That is better,' said the editor, 'but don't you think you could condense it yet more, so that it would only fill half the space it now occupies, and all without leaving out any important parts?' The young writer took the article home again, and returned it next day as requested, so that it was not only *one quarter* of its original length, and yet no thought or important point had been left out. In that shape it was published, and was copied everywhere, and laid the foundation of its author's world-wide reputation as a writer. If the good editor had been indulgent enough to accept the manuscript as at first written, probably few would have read it; it would never have been heard of afterward, and Mr. Prime might never have been encouraged to achieve the fame he has to-day."

**Obituary.**—*Action of the Medical Profession in Regard to the Death of Dr. Landon C. Rives.*—A meeting of the physicians of Cincinnati was held at the lecture room of the Dental College, on the 6th June, to take action in regard to the death of Dr. Landon C. Rives. Dr. Carroll was appointed Chairman, and Dr. Mackenzie, Secretary.

The Chairman, after stating the object of the meeting, gave a short sketch of Dr. Rives' life. He was born in Virginia; attended lectures and graduated as a physician in Philadelphia, and in 1830 settled in Cincinnati, where he practiced until 1857, when he retired. He had at one time been a professor in the Old Cincinnati College, and afterward filled the chair of midwifery in the Medical College of Ohio. As a lecturer he had been successful both as regards the composition of the lectures and the manner of delivery. The last years of his life had been embittered by the loss of his wife and two children, which had left a deep impression on his mind. He had also frequently regretted that his intercourse with his professional brethren had, of late years, been less intimate than he should have desired.

A committee was then appointed by the Chair to draft appropriate resolutions. It consisted of the following gentlemen: Drs.

Dawson, Tate, Mussey, M. B. Wright, Comegys, Vattier, and Carson.

The following preamble and resolutions were drawn up by the committee:

TRIBUTE OF RESPECT TO THE MEMORY OF DR. LANDON C. RIVES.

Under a decree of the Creator, we are called upon to mourn the death of an old and distinguished member of the profession, Dr. Landon C. Rives. Dr. Rives died in his eightieth year, at the residence of his son-in-law, Rufus King, Esq., in this city, at 9 P. M., Friday, June 3. He was born in Nelson county, Virginia, and graduated in Philadelphia in 1821. He engaged in the practice of medicine in his native state until the year 1829, when he removed to this city; from this until 1857, when he abandoned the active pursuits of his profession, he had a large family and consulting practice. He was a member in the Cincinnati College of the most distinguished faculty which ever assembled in the West, consisting of Drake, Rives, Parker, Rogers, Harrison, Gross and McDowell. Most of these gentlemen were called to other schools, and the Medical Department of the Cincinnati College, after a most successful career, was abandoned. Two of his colleagues survive him—Samuel D. Gross and Willard Parker.

In 1849, Dr. Rives was elected to the Chair of Materia Medica in the Medical College of Ohio; in 1850, he was transferred to that of Obstetrics, and in 1854, he resigned the latter after a most successful professional experience.

It will be seen that more than forty years ago he entered upon his career in this city. He rose to an eminence by his profound learning, high character, and honorable bearing, which challenges the admiration of all.

In his generous encouragement to young men, in his unexceptional conduct toward those of his own years and position, aye, in his refined courtesy to all members of the profession, we recognize an example worthy of the highest commendation. In his intercourse with his patients, his touch was soothing, his sympathy consoling, his mind firm and decisive. Indeed, he possessed in a remarkable degree all the elements which are essential to make the "beloved physician." As a friend and neighbor, his exertions were only bounded by his ability to serve.

Distinguished as he was in his profession, exalted as he was as a citizen, still his life shone brightest in his good deeds, in his social



virtues, in his pure integrity, in the close intimacy of his friendships, and in the circle of his own family.

The death of such a man at fourscore years, without a tarnish upon his name, full of years, full of honors, calmly, peacefully, without pain, without suffering, surrounded by his family, brings sorrow to those who survive him; but it leaves them memories, precious recollections, which can not be estimated.

*Resolved*, That we will ever hold his memory in the highest esteem, and point to him as one who adorned the profession to which he, during his long and useful life, was, and to which all of us are, so devotedly attached.

*Resolved*, That to his family we extend our condolence in their great affliction.

*Resolved*, That as a further mark of respect, we will attend his funeral in a body.

*Resolved*, That a copy of these resolutions be sent to the family of the deceased, and for publication to the city papers and medical journals of the state.

Remarks were made by Drs. Murphy, White, Dawson, McIlvaine, and Kemper, dwelling upon the personal, professional, and social virtues of the deceased.

***Death of Prof. Charles Pope.*** We learn with profound sadness of the recent death at Paris of this distinguished St. Louis surgeon. More keenly do we feel the sorrow of the tidings in that death came from his own hand. Blessed with all that the world esteems of value—wealthy—successful—honored and beloved, as man, surgeon and teacher, he has by some mysterious derangement of his great intellect hurried into eternity. God have pity.

***Dr. J. S. Hildreth*** a well known physician of Chicago specially known as an Ophthalmologist, and held prominent positions in the late war, died recently in that city.

***Died.***—FACKLER—In Versailles, Ohio, on Monday, June 20, 1870, Mrs. B. E. Fackler, wife of Dr. John E. Fackler.

## Selections.

***Suppression of Pain after Operations.*** At the last meeting of the Imperial Academy, M. Sedillot submitted a note on "The suppression of Pain after Operations." He observed that a patient may undergo an operation in a state of absolute insensibility, but a state of suffering awaits his arousing from this condition, which it should be our object to avert. Opiates, refrigerants, chloral, etc., have been tried with this object without attaining it. The various kinds of cauterization render traumatic surfaces insensible and exempt from accidents. The actual cautery effects this, but the rapidity with which it cools, and the superficial character of its action, much restricts its employment. M. Nelaton tried the gas cautery, but the eschars this produces are too superficial, and the same may be said of those induced by a flame of oxygen and hydrogen experimented on by M. Sedillot. Of all measures of this kind the electric cautery, as perfected by the late Prof. Middledorff, of Breslau, is the best and most certain. The degree of heat can be instantly varied as desired, rendered intermittent or continuous, and directed into the deepest cavities, or employed for the division of every description of tissues. To prevent loss of blood, it must be employed at a white heat, taking care to divide or destroy the tissues with extreme slowness. In this way M. Sedillot has performed numerous operations without loss of blood and with great success. Burns, he observes, of the third degree cause but little pain; and he has seen persons mortally burnt preserving for several days their appetite and sleep and hopes of cure. This absence of suffering in the severest burns is explained by the destruction of the nerves. And in the same way the electric cautery renders the wound it causes insensible, so that persons operated upon by its agency under chloroform experience on awakening no suffering. Later, at a period varying from the third to the ninth day, an inflammatory reaction is set up, but it is generally very slight, fever either being entirely wanting or soon ceasing.—*Medical Times and Gazette*, May 14, 1870.

***Manganese in Blood and Milk.*** A memoir has just been read at the Royal Academy of Sciences of Italy, by Prof. Polucci, announcing a great discovery. It is the constant presence of manganese in the human blood. In more than twenty analyses of the blood of persons of different sexes, professions, health, and temperaments, there was always found a certain proportion of manganese.

One of the consequences of this fact is that the metal ought to be also found in milk. Submitted to experiment this deduction is entirely confirmed. In thirty-four analyses of milk, twenty-three of which were human, four from the cow, and four from the goat, the presence of manganese was constantly observed.—*Medical Press and Circular*, May 18, 1870.

***Deaths from Chloroform.*** In the *Boston Herald* (quoted in the May number of the *American Journal of Dental Science*) will be found the notes of a case of death from chloroform, administered for the extraction of twelve teeth. The patient, Mrs. Bradford Toote, of Sheffield, had partly recovered consciousness after the operation when she suddenly seemed to choke, and died in a few minutes in the dentist's office, at Great Bonnington, Mass.

In the mortality reports of deaths in the city of Boston, for the week ending April 9, is one of a man, aged 65, who died "during inhalation of chloroform at Deer Island."—*Boston Med. and Surg. Journal*, April 14, 1870.

***Paralysis of the Bladder.*** Dr. Van Holsbeek has employed with success electricity in paralysis of the bladder. He introduces an instrument into the bladder, and another into the rectum, connects them with the poles of an ordinary machine, and allows the continuous current to pass for a quarter of an hour. In seven sittings he has cured paralysis which resisted all other remedies.—*Medical Press and Circular*, May 11, 1870.

***Mercurial Suppositories in Constitutional Syphilis.*** Prof. Lebert states (*Berlin. klin. Wochenschrift*, April 4) that he has of late had such success in the employment of these that he is desirous of calling attention to their value. They are formed by mixing mercurial ointment with butter of cocoa and white wax so as to obtain a convenient consistence.—*Medical Times and Gaz.*, May 21, 1870.



# University of Pennsylvania

## MEDICAL DEPARTMENT

### NINTH STREET, above CHESTNUT, PHILADELPHIA.

The Lectures of the Session of 1870-71 will commence on the second Monday (10th) of October, and close on the last day of February ensuing.

#### *MEDICAL FACULTY.*

GEORGE B. WOOD, M. D., Emeritus Professor of Theory and Practice of Medicine.  
 SAMUEL JACKSON, M. D., Emeritus Professor of Institutes of Medicine.  
 HUGH L. HODGE, M. D., Emeritus Professor of Obstetrics and the Diseases of Women and Children.

JOSEPH CARSON, M. D., Professor of Materia Medica and Pharmacy.  
 ROBERT E. ROGERS, M. D., Professor of Chemistry.  
 JOSEPH LEIDY, M. D., Professor of Anatomy.  
 HENRY H. SMITH, M. D., Professor of Surgery.  
 FRANCIS G. SMITH, M. D., Professor of Institutes of Medicine.  
 RICHARD A. F. PENROSE, M. D., Professor of Obstetrics and the Diseases of Women and Children.  
 ALFRED STILLE, M. D., Professor of Theory and Practice of Medicine, and of Clinical Medicine.  
 D. HAYES AGNEW, M. D., Professor of Clinical and Demonstrative Surgery.

H. LENOX HODGE, M. D., Demonstrator of Anatomy.

One Introductory will be delivered to the Course.

Clinical instruction is given daily throughout the year, in the Medical Hall, by the Professors and at the Hospitals. At the Philadelphia Hospital, containing 900 beds, instruction is free.

The Dissecting-rooms, under the superintendence of the Professor of Anatomy and the Demonstrator, are open from the middle of September.

The Room for Operative Surgery and the Application of Bandages, etc., etc., is open early in September, and throughout the session, under the supervision of the Professor of Clinical and Demonstrative Surgery.

#### *EXPENSES.*

Fees for the Course of Lectures,	-	-	-	-	-	\$140
Maticulating Fee (paid once only)	-	-	-	-	-	5
Graduating Fee,	-	-	-	-	-	30

#### *CLINICAL LECTURES.*

WILLIAM PEPPER, M. D., Lecturer on Clinical Medicine.  
 EDWARD RHOADS, M. D., Clinical Lecturer on Physical Diagnosis.  
 JAMES TYSON, M. D., Clinical Lecturer on Microscopy and Chemistry, applied to Diseases of the Urinary Oagans.  
 EDWARD A. SPOONER, M. D., Clinical Lecturer on Diseases of Women and Children.  
 D. HAYES AGNEW, M. D., Professor of Clinical and Demonstrative Surgery.  
 HARRISON ALLEN, M. D., Clinical Lecturer on Syphilis.  
 GEORGE STRAWBRIDGE, M. D., WILLIAM F. NORRIS, M. D., Clinical Lecturer on Diseases of the Eye and Ear.  
 JAMES E. GARRETSON, M. D., Clinical Lecturer on Surgical Diseases of the Mouth.

#### *AUXILIARY FACULTY OF MEDICINE.*

HARRISON ALLEN, M. D., Professor of Zoology and Comparative Anatomy.  
 HORATIO C. WOOD, Jr., M. D., Professor of Botany.  
 F. V. HAYDEN, M. D., Professor of Mineralogy and Geology.  
 HENRY HARTSHORNE, M. D., Professor of Hygiene.  
 JOHN J. REESE, M. D., Professor of Medical Jurisprudence, including Toxicology.

The sixth course of the Auxiliary Lectures will begin on the last Monday in March, and terminate the last Thursday in June. These Lectures are free to all Students of the regular Medical Course.

R. E. ROGERS, M. D.,  
 Dean of the Medical Faculty, University Building.

W. H. SALVADOR, Janitor, University Building.

P. S. Board may be had at from \$4.00 to \$6.00 per week.

\* \* \* Alumni of this Department who are permanently settled, and other medical practitioners, who desire to receive the Catalogue and Announcement regularly, are respectfully requested to send their addresses to the Dean, P. O. Box 2630, Philadelphia.  
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THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Vol. XIII.—SEPTEMBER, 1870—No. 9.

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Original Communications.

*Art. I.--Vaccinal Syphilis. Is there danger of conveying other constitutional affections than vaccinia, by means of human vaccine lymph?*

Part of DR. W. B. DAVIS' Report to Ohio State Medical Society.

Over seventy years have elapsed since the introduction of vaccination by Jenner. The majority of the population of the civilized world have been vaccinated. If the vaccine lymph will convey constitutional diseases, other than vaccinia, its wide-spread use during these seventy years, will show a large increase of constitutional affections.

A careful examination of the record for this period does not show that there has been such an increase. On the contrary, statistics, according to Farr, Greenhow, and others, prove that scrofula and other constitutional diseases have diminished, and that the average duration of life has been extended, since the introduction of vaccination.

The *British and Foreign Medico-Chirurgical Review*, for January, 1869, makes the following statement, page 126: "It can not be disputed that the average tenure of life has been lengthened by vaccination, and that a most horrible and disgusting disease (which, where it did not kill, often rendered its victim blind or deaf, and generally hideous for the remainder of life), has been well-nigh exterminated."

Niemeyer, of the University of Tübingen, in his recent work on Practical Medicine, says on page 553, Vol. II: "All objections to vaccination, even if well founded, would have to give way to the facts proved by statistics, that in the last century one-tenth of the population died of small-pox (about 400,000 people dying of the disease every year in Europe), another one-tenth were disfigured by the disease; and that since the introduction of vaccination, the general mortality is less, and that of small-pox is reduced to a minimum."

There are certain cutaneous eruptions which follow the operation of vaccination, just as they may follow teething, or any other slight constitutional disturbance. Mr. Padget pointed out this fact twelve years since, when he wrote that "multitudes of children are naturally predisposed to the commoner eruptions, and that vaccination is only one of many trifling constitutional irritations, which might have precipitated the first appearance of such eruptive diseases." And more recently Niemeyer, in his Practical Medicine, says: "We know that blisters and other irritants to the skin, not only induce inflammation at the point of application, but also increase the predisposition to other cutaneous affections. Many children who have never previously suffered from any exanthema, are affected for months with moist eczema of the face, after having their ears pierced, as well as after vaccination."

Vaccine lymph, when long exposed to air and moisture, will undergo the same putrefactive changes that any other animal matter does when similarly exposed; and if inserted in the arm of a subject, will produce the same effects that any other putrid matter will produce. When erysipelas or pyæmia follow the use of decomposed lymph, the vaccine is not at fault, but the vaccinator, who has been criminally careless, or criminally ignorant.

The advocates of transmission, however, do not press these minor points, and seem, indeed, to have abandoned their claim for the transmission of all constitutional diseases but that of Syphilis. Upon this one disease they rally their full strength. I shall, there-



fore, now invite your attention to the consideration of the possibility of engrafting syphilis by means of Jennerian vaccination.

It is a fact worthy of notice, that a large majority of all the reported cases of vaccinal syphilis, have occurred in France and Italy. In England, where vaccination is more systematically pursued, and where the official inspection, to which it is subjected, would render the escape of any abnormal development impossible; there are but a very few cases reported.

Whether or not, syphilis, independent of vaccination, is more prevalent in France and Italy than other countries, is a consideration of some moment in its bearing on this question. An affirmative answer might suggest a satisfactory solution of vaccinal-syphilis, so far as these two countries are concerned, without implicating the vaccine lymph.

According to Padget, the transmission of syphilis by means of vaccination, is opposed by pathological considerations. Such pathologists as Rokitsansky, Skoda, and Hebra maintain that the insertion of a matter containing the virus of two different contagious affections, is followed by the production of but one disease. That is, if the matter used be a mixture of syphilitic and vaccine virus, either distinct syphilis or distinct vaccinia is the result; not both of them.

It is opposed by direct experiment. Lymph intentionally taken from vaccine vesicles on syphilitic subjects, produced only vaccination.

M. Delzenne recently reported in the Imperial Academy of Medicine, Paris, that in 1865 he had inoculated himself twice with vaccine from syphilitic subjects, and the result was negative. In September, 1866, he vaccinated a syphilitic patient, 21 years old, "who had numerous ulcerated, hypertrophied papules in vulva and perineum, a general papular eruption (Syph.) over body and mucous patches in mouth and throat." On the eighth day he vaccinated himself in four places with the virus from this patient, and the result was negative. He also, at the same time vaccinated seven females (free from syphilis) with the same lymph. The effect, so far as syphilis was concerned, was entirely negative—four responded perfectly to the vaccine.

M. Bourguet reported twenty cases whom he had vaccinated with lymph from the arms of two syphilitic subjects, and the result was negative for syphilis. M. Guerin reported fifty-five experiments combining all the characteristics of scientific experiment,

which responded negatively to the artificial production of vaccinal syphilis.

These confirm the experiments previously made by Cullerier, Taupin, Heim, and others.

If, however, the matter from a chancre be accidentally or intentionally inserted in the arm of a patient, it will produce syphilis, but the lymph from a vaccine vesicle on the arm of a syphilitic subject, will only produce vaccinia, just as the lymph from a vaccine vesicle on a patient who is broken out with the small-pox (the vaccination having been performed too late for protection), will only produce vaccination, while the pustules by its side will produce small-pox.

It is opposed by the experience of the greatest vaccinators and syphilographers. West, with an experience of 26,000 vaccinations; Marson, with 40,000; Sir W. Jenner, with 13,000; Seaton, with 50,000; Tomkins, with 50,000; Perkins, with 40,000; Loines, with 200,000; Clendenin, with 16,000, and many others who might be named, have never met with a case of vaccinal syphilis.

The following question was addressed by Mr. Simon, in 1856, to the most distinguished medical gentlemen of Germany, France, and Great Britain: "Have you any reason to believe or suspect that lymph from a true Jennerian vesicle has ever been a vehicle of syphilitic, scrofulous, or other constitutional infection to the vaccinated person?" Near six hundred replies were received, and they were almost unanimously in the negative. Among whom were Padget, West, Marson, Tomkins, Acton, Lee, Parker, Chomel, Bright, Watson, and Brodie.

A large proportion of the reported cases of vaccinal syphilis rests upon insufficient or defective evidence, and the remainder may be reasonably accounted for, without compromising the vaccine, on the grounds (1) of the influence of prevailing diseases; (2) a cachectic diathesis, and (3) latent constitutional syphilis.

Vaccinal-syphilis had but few advocates, either in or out of the profession, until the so-called epedemics of "Rivalta," in 1861, and subsequently of "Auray" (provinces of Italy and France) made their appearance. These epedemics aroused the attention of the profession, and led to a thorough investigation of the causes which produced them.

Concerning the "Rivalta" cases, Ricord says: "For our part, an attentive perusal of the documents of the case, has led us to the same conclusion as Dr. Abertetti, who exonerates from all blame

the vaccination in question." With reference to the Auray epidemic, Dr. Anstie, in the *Practitioner* of November, 1869, says: "Upon the whole evidencé we say, decidedly, that it is not proved that the epidemic of Auray was an epidemic of syphilis at all, far less that it was an epidemic of vaccine-syphilis."

Dr. Seaton calls attention in his *Handbook* to the fact, that long before vaccination was heard of, Astruc recorded epidemics of syphilis, which were to the full as disastrous and as unaccountable as that of Rivalta.

In the recent discussion in the French Academy, M. Depaul, Director of Vaccination, reported a large number of cases of vaccinal syphilis, as having occurred in the arondissements of Lorient and Vannes.

M. Fouquet stated that there were other vaccinations in those districts with accidents analogous to those reported by M. Depaul, viz: highly-inflamed pustules, large deep ulcerations, abundant eruptions, etc., but that these accidents had not an impure origin, and presented nothing suspicious, although the characters noted by him had the greatest analogy with those reported syphilitic by M. Depaul. M. Guerin asserted that the explanation of these cases of M. Depaul, was to be found in a general erysipelatous diathesis prevailing in those departments. He called attention to the fact that any local irritation would develop a latent constitutional taint, and said that *vaccination would not be a port of entry for syphilis, but a means of exit*. In support of the assertion, that prevailing diseases modify vaccinations and produce suspicious sores, he referred to the work of M. Lalagade, Director of Vaccinations of Tarn. On May 25th he vaccinated ninety-five children with lymph from a healthy child. On June 6th a number of them were found in a sad condition, "the skin was of a deep red, with erysipelatous aspect, vaccinal pustules very large and grayish white, black crusts all over the body, except the soles of the feet, and on the genital organs; one was covered with red patches, similar to measles, another had, the day after the vaccination, large bullæ filled with serum." There was, also, an epidemic of pemphigus complicating the inoculations. On inquiry into the public health in the neighborhood, he found erysipelas, diphtheritic angina, malignant pustule, wounds with sanious bases, and numerous cases of pemphigus. On April 10, 1869, he adds: "I am happy to say that to-day none of the children who were vaccinated May 25th,



1868, bear even a doubtful trace of syphilitic disease, and that none of them had undergone specific treatment.

M. Guérin concludes, on this point, by observing:

1. That vaccinal syphilis, up to this time, fails in the majority of points which would support a belief in such an origin.

2. That experiments instituted to determine the possible inoculation of vaccinal syphilis, are quite contrary to the doctrine of syphilitic vaccination.

3. That among a large number of alleged facts of vaccinal syphilis, most, if not all, belong evidently to another order of pathological influences.

And further along in the discussion, he asserts, that the causes which are likely to vitiate vaccine and give it the false appearance of syphilis, are of a nature to exercise their influence equally upon human and animal vaccine. These causes, foreign to the vaccinator, are either exterior to the subject vaccinated, or inherent in his constitutional state—both more or less susceptible of being determined, prevented, or combatted.

I recently addressed a letter to Dr. J. K. Barnes, Surgeon General U. S. Army, asking him if there was any evidence on file in his office which reported the existence of any vaccinal syphilis among the 2,000,000 of soldiers who took part in the late American war. In reply, he very kindly wrote: "That quite a number of papers are on file in this office bearing on the subject of foul ulcers following vaccination, and supposed by some to be due to the contamination of the matter employed with syphilitic virus. I have made a preliminary examination of these papers, and have arrived at the conclusion that their general tenor is directly opposed to this supposition."

Prof. J. Jones, of New Orleans, has published a paper on "Spurious Vaccination," based on materials furnished by the Confederate Army. His conclusions agree with those of the Surgeon General, in exonerating the vaccine from blame, and referring the foul ulcers which attended vaccination in the army, to the fatigue, exposure, uncleanness, insufficient and improper diet, etc., incident to a soldier's life, which resulted in a cachectic diathesis.

Wm. Clendenin, M. D., Medical Director of Hospitals U. S. A., at Nashville, during the late war, and at the present time Health Officer of Cincinnati, has furnished me a report of his views on vaccination. His experience and opportunities for personal inspection of the ulcers, and so-called cases of vaccinal syphilis,

which followed vaccination in the U. S. Army, were so great, that his views concerning them will be of value. His conclusions fully accord with those above expressed.

In reply to my inquiry, Dr. Seaton in his letter of April 9th, writes: "I am not aware of any fresh cases of alleged introduction of syphilis by vaccination with humanized lymph, since I published my book, but curiously enough there has been discussion lately in France on some cases of syphilis in children who had been vaccinated with animal lymph. Of course, the syphilis was a latent syphilis, and the vaccination could have nothing to do with it, except, perhaps, to hasten its evolution; but the cases are instructive, and point, in my opinion, to the explanation of all the alleged cases of vaccino-syphilitic inoculation with humanized lymph, except those in which there was downright carelessness and mixture or substitution of viruses."

This opinion of Dr. Seaton is supported by M. Guerin's terse assertion in the Academy, that "Vaccination is not a port of entry for syphilis, but a means of exit;" and by the *Medico-Chirurgical Review*, January, 1869, which says, "it is not the vaccination, but the parentage which is at fault."

I will close this section of my report by quoting the declaration of Dr. Anstie, in the *Practitioner*, of November, 1869: "*Vaccinal syphilis is a bug-bear and a phantom.*"

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#### *Art. II.—Case of Extraction of Cataract.*

By A. N. ELLIS, M. D., Leavenworth, Kansas.

M. R., aged thirty, has been afflicted with cataract in the left eye, for about two years. She could only perceive light, when the pupil was dilated with a strong solution of atropine.

December 20, 1869. Applied for relief. Gave her tonics to prepare her system for the operation.

January 4, 1870. Assisted by Dr. G. L. Moad, I operated by Graefe's modified Linear Extraction. The section was made about one-third of a line above the cornea, and was about four and one-half lines in extent. A large iridectomy was next made, and the capsule freely lacerated.

The lens was readily removed by the manipulations of the curette. This was placed upon the lower edge of the cornea, and pressed slightly backward and upward, so as to cause the edge of the lens to present itself in the section. The pressure was then made directly backward, and the lens was rotated around its transverse axis, and tilted well forward into the incision, when it came away, almost entire, leaving the capsule, which caused some swelling and opacification for some time after the operation. No vitreous escaped. Slight hemorrhage followed the completion of the section.

The cataract was of that class known as the nuclear or hard senile cataract. Liebreich's bandage was applied, and at the end of the first twenty-four hours, a few drops of a solution of sulph. of atropia (grs. iv. ad aquæ  $\bar{z}$ i) were instilled into the eye. Very little pain was felt for forty-eight hours after the operation, when some iritis supervened, doubtless caused by pressure of the capsule against the iris, which had already been wounded or contused by the instruments during the operation. The lids became swollen, and there were present considerable photophobia and lachrymation. Used the atropine solution freely, and applied warm dressings until the fifth day, when the patient was free from all pain.

*June 1.* Much of the capsule has been absorbed. The eye is, and has been, entirely free from all pain for a long time. The patient reads No. 4 of Jaeger's test types, with the aid of a cataract glass.

From the great success attending Graefe's new method, it is now ranked among the great improvements of modern surgery. In each of a half a dozen cases I have met with gratifying success. In only one, was there a loss of a small quantity of vitreous, and in two, hemorrhage into the anterior chamber took place, which, however, was readily absorbed.

While some specialists say that the incision should not be less than five lines in extent, in my opinion, it should be left to the judgment of the operator. The exact line and size of the incision should vary with the size and hardness of the nucleus and the size of the cornea.

All other things being equal, the greater the incision, the greater the risk of loss of the vitreous. This is an accident to be deplored, and against the occurrence of which we should take every precaution. The escape of this fluid is apt to push the



cataract away from the incision, necessitating the introduction of the scoop with its dangers, fragments of the lens and capsule are shoved aside and left behind the iris, thus protracting the healing process and increasing the danger of subsequent inflammation.

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*Art. III.—Milk Sickness.*

By J. BOWMAN, M. D., Flora, Illinois.

*To the Cincinnati Lancet and Observer:*

DEAR DOCTOR STEVENS:—It would be very interesting to me to read some articles in your valuable journal regarding the diseases called milk sickness and congestive fever. There has been and is still an occasional case of the disease termed milk-silk, and more cases of congestive fever in this region of country, and I am conscientiously and practically obliged to differ with some of my medical brethren here regarding the diagnosis, and consequently in the treatment.

A few thoughts deduced from my own observation regarding the diagnosis and legitimate treatment of these two diseases, and I leave the subject to those more competent, soliciting the views of those who have experience in these diseases. As we have but very little information in our standard works and text books, I am confident that any such communication will be read with interest by the younger members of the profession. I am fifty years old, and have met the disease called congestive fever in Maine, Ohio and West Virginia, but not milk-sick; while here, in Illinois, I meet both.

The questions I ask, are the diseases called milk sickness and congestive fever one and the same disease? and if they are, why are not the peculiar symptoms attending milk-sick not met with in localities in the North and East, where congestive fever prevails? I have reference to obstinate constipation and vomiting, cold extremities, absence of fever, languor, low feeble pulse, pale cold skin, extreme precordial oppression, and a more definite symptom, that peculiar fetor or smell (which I can not describe)

which is only met with in the milk-sick room, together with more or less muscular tremor.

The sequelæ or yearly periodical return of this milk-sick feeling, as the individual describes it, attended with weakness in the limbs, a sluggish gait, depressed spirits, in short, as some old ladies say, a "gone-ness." This state of things does not follow in congestive fever. True, some of the above symptoms may, to some extent, be met with in congestive attacks, but the bowels are generally more readily opened, the vomiting relieved, the extremities (if cold) are warmed up with friction and warm foot baths, etc.; while in milk-sick I have worked for days before getting up reaction. And, too, in congestive fever we have flushed face, skin hot and dry, tongue red, and elevated papilla with dark brown coating (if any), and I more frequently find the tongue red and fiery, with not any coating; while in milk-sick the tongue has a white pale color, looks as though there were no blood in it. It may be said that in malarial districts the type of congestive fever may differ from a non-malarial region. This is true in all diseases. I seldom meet a genuine type of typhoid fever here, but rather a bilious complication with more regular intermissions or remissions, generally early established, consequently I seldom have a lingering case of typhoid disease, as they are more readily broken up with anti-periodics, etc. My judgment is that, although the miasmata has some influence in producing milk-sickness, still there are certain localities where the cattle and individuals take articles into the stomach, thus contributing direct virus or poison to the blood to produce the disease.

I have not time or space now to give my particular views as to the causes of the disease or its treatment, but, if desired, I may give them at another time.

P. S. I have two cases of milk-sick under my treatment, at this time.

*Art. IV.--Report of a Discussion upon Hospitalism and Zymotic Diseases as more especially Illustrated by Puerperal Fever or Metria.*

Abridged from the authorized Report.

By AND. C. KEMPER, A. M., M. D., Cincinnati.

[Continued from the July number.]

Dr. Evory Kennedy said :—" In replying to the objections and criticisms of seventeen learned doctors, I find my task lightened by the fact that most of my commentators have answered themselves and each other. In reply to Dr. Johnston, I would say that I do not myself quite see why metria should prevail in the lying-in hospital, when fever, typhus, and erysipelas prevailed in medical and surgical hospitals, but I know it to be the fact, and so did Dr. Collins, Abraham Colles, Dr. Clarke and Dr. Labatt. When we consider the frequency with which metria follows the introduction of zymotic diseases into the lying-in hospital, we can not do otherwise than regard them as cause and effect. Although the hospital is charged with being the habitat of metria, a fact which can not be disproved, yet it may be specially engendered by the introduction of a case of zymotic disease. Metria must prevail endemically in the hospital if it has there its habitat. It is notorious that metria often commits dire havoc in our hospitals without extending epidemically, or at all outside of them. Malaria miasm, zymotic poison does find its habitat in lying-in hospitals, and the fact has forced itself upon public and professional consideration in Europe and elsewhere, and we are here to investigate the cause of this, to Dr. Johnson, impossibility. The statistics of the present assistant of the Rotundo disprove Dr. J.'s statements. For the year 1868 there were 1,132 deliveries, 29 deaths; deduct 4 for deaths in the chronic ward and we have a deathrate of 1 in 45. Now, in the 18 years for which I take my average as establishing endemic diseases, there are 6 years in which the deathrate is more favorable to the hospital than that of 1868, of which it is said that "nothing like miasm exists," in the same breath that 18 deaths or 1 in 63 from zymotic metria are admitted. Although I have taken the gross mortality in



drawing comparisons with other tables of mortality in this discussion, I willingly accept the statistics for 1868 of the present resident assistant, exhibiting the large mortality of 1 in 63 *by metria alone*, as proving that metria has its habitat in the Rotundo. But not any one year, nor two, nor even three; whatever their deathrate may be, will affect the issue, so long as the law of metria makes it the disease it is, fitful and capricious in its appearance, disappearance and duration. The Rotundo is not "as healthy as one could desire." Its construction is faulty in its being a double house, with an intermediate corridor, converting four great wards, with nine beds in each, and eight smaller wards, with three beds in each, into one great warren or plateau of connected rooms, with a similar plateau over it, with perforated openings in the ceiling of the lower corridors, which secures the same atmosphere prevading both corridors and the chambers. A general commingling atmosphere is thus secured through doors, staircases, and perforated openings, so connected throughout that miasm must prevade all, if once generated. In fact, so constructed that isolation is totally impossible, as it is impossible to open a door, or to go in or out of any room in the building, without diffusing the tainted atmosphere, if it exists, throughout the whole structure. Dr. Johnston is thus refuted by the statistics of his own assistant.

Dr. Kidd has expressed views more advanced. I sincerely deplore that he should be almost and not entirely convinced of the necessity of complete isolation. The modified attempt at isolation recommended by the Conference at Paris, in 1866, is about to be carried out in the Coombe.\* But this is not true isolation, and if it leave the impression on the public mind, either that enough has been done in this experiment, or that nothing more need be attempted, as this has failed, then by its failure or partial success it only perpetuates the mortality and is worse than useless. Dr. Kidd thinks the disease highly contagious; that if the results of the comparison of external practice with that of lying-in hospitals is to be relied upon, the hospitals ought to be closed at once and forever; and finally admits the hospital influence. Here we have the honest, manly statement of this enlightened man, himself a hospital physician of no slight experience, conversant with his subject and sustaining, to the letter, the views I have propounded,

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\*The Paris administration has since recommended single bedrooms.

on the eve of building an hospital so constructed as to collect a number of patients under one roof, when he admits fairly, "it is impossible to collect them under one roof and not to have an hospital atmosphere, and that that hospital is more or less injurious." The plan tried at the St. Petersburg hospital resulted in an improved deathrate from 1 in 32 to 1 in 34, and the gain of 2 in 34 did not justify the trouble and expense. But what if Dr. Kidd's life had been one of those two? Sanitarians are proud of reducing a deathrate by 1 in 1,000. The improvements in the St. Petersburg hospital did not test the plan of isolating patients literally because the wards open into each other, and my plan, therefore, has not been there tried nor failed. Nor will they at their Coombe, by separating patients after the attack, try my plan.

Dr. Mapother, the highest authority on zymotic disease in this kingdom, says that the remarkable statistics I have brought forward with regard to the mortality of the Rotundo and the small provincial hospitals of Waterford, New Ross and Limerick, have not been controverted.

Dr. Churchill in saying that my recommendations are both hasty and injudicious now, admits in that word now, the necessity that shall or may exist hereafter. His observations are of the greatest value in confirming all my views on this subject. He asks seriously, if metria be produced spontaneously why do long periods of freedom from it occur under precisely the same hospital conditions as those which accompany its appearance? I may ask him just as seriously, what is the weight of a mail coach? Or suppose he substitutes the adverb epidemically for spontaneously, and answer his own question. In his statistics of the mortality in the private practice\* of six obstetricians giving for some of them the mortality by metria only, and for others the general mortality, he does not conform to his own rules. I hope that Dr. Churchill means by the extent of statistics, their comprehensiveness and accuracy, otherwise I can not agree with him. One idea of extent is given in his comparing 236,665 maternity with 71,090 large hospital deliveries, and he makes the deathrate for the maternities 1 in 149, and for the hospitals 1 in 62. On his own calculation there is here a difference of  $2\frac{1}{4}$  to 1. If now is

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\*All except Dr. Kennedy give the deaths from metria in the private practice of Dr. Joseph Clarke as six. The true statement is 3 in 3,847, or 1 in 1282. These statistics have been confused with those of Dr. M. Clarke.

not the time to rectify that difference when will that time be? I shall not criticise Dr. C. for his confusion in attempting to give the fatality of metria distinct in his statistics. It is impossible to do so, and the only reliable test of comparison is the total mortality in all cases, which I have invariably given when not otherwise stated. Of the twelve small hospitals only three are so really, the other nine exhibiting all the vices of the large lying-in hospitals with none of their advantages. These nine were mostly old houses with a number of rooms communicating, with story above story, with every disadvantage of small crowded rooms, and a stagnating atmosphere. Our large city hospitals are infinitely superior. The mortality of these nine hospitals was 1 in 59 whereas that of the three I referred to as truly in accordance with my plan was 1 in 282. I am exceedingly obliged for such useful statistics. Again I find in his comparison of statistics that his statistics of two of these nine hospitals embrace a period of only three years, while those for the Waterford extend over a period of thirty; how admirably he adheres to his own, in the main, excellent rules.

Dr. Morgan's report of the Lock Hospital was extremely interesting. Different morbid poisons can not coexist in the same individual. The syphilitic virus resisted the metria zymotocene. The two beds of the Lock, with all their combination of depressing influences, had a mortality of 1 in 74, the Rotundo 1 in 31, the only assignable cause of the excess being the proportion of the deliveries under the same roof, constituting the hospital the habitat of metria in the one case; whereas, every other ingredient of calculation, mental as well as physical, was in favor of the excess in the other, but it was wanting in the habitat. The records of the English poorhouses are strongly corroborative of the views here insisted upon, and the statistics derived from them show, in a remarkable manner, the saving of human life effected by the poorer classes lying-in in the poorhouses, as compared with those confined in one great lying-in hospital. This fact has already attracted the attention and obtained the confirmation of sanitary and parliamentary committees. They have a very large air space much exceeding 850 feet to each parturient. The records of lying-in cases in the poorhouses, say the Cubic Space Commissioners, exhibit a mortality less than in any other institution. It is six times less than that which occurs in the chief lying-in institutions in the metropolis, viz: The Queen Charlotte Hospital, and



it is more than ten times less than now occurs in the chief lying-in institutions at Vienna and other continental cities. The astonishing assertion has been made that the mortality of the external practice of the Rotundo was 1 in 61. But for the year 1868-9, it was 1 in 147, while that within the hospital for the same time was 1 in 45; the very time of which Dr. Johnston, asserts that the hospital was in an improved condition.

Dr. McClintock, speaking of the Rotundo for the four years 1816-19, says: "This was certainly enormous cohabitation, *and it did certainly breed an epidemic of puerperal fever.*" He also "*conceded readily* a greater mortality amongst women confined in these institutions as compared with the aggregate of women confined in their own homes." He thus admits the whole principle for which I contend. In laying down the proposition that the mortality was in proportion to the number of parturients in a given space I did not assert that that statement applied ever and always to the *very time* the crowding occurred. The whole tenor of my reasoning goes to prove the reverse. I dwelt especially on the capricious nature of this zymotic disease, and referred to the statistics of the Rotundo to show this peculiarity in its endemic hauntings. I stated that the mortality arose and continued as the result of the previous crowding. In 1818, for instance, there were 3,539 deliveries, more than ever before or since, and for three years thereafter the mortality arose to 1 in 44. On every occasion when the hospital was crowded metria showed itself sooner or later. When metria occurred in the hospital it established its habitat there and continued it for a longer or shorter term notwithstanding every means that could be adopted; and although a reduction in the number of deliveries had an effect in ultimately improving the healthiness of the hospital, even these measures repeatedly failed in abating the evil immediately when once the habitat of metria was thoroughly established; and the hospital has been repeatedly closed entirely. The table of deathrates of the Rotundo establishes my position incontrovertibly. It is then true that metria occurs in direct proportion to the number of parturient females cohabiting at their parturient period. The contagion is cumulative, or growing in its contagious power, requiring a longer or shorter time to arrive at its full intensity or saturation. This law accounts for the interval of time observed to elapse before the outbursts of the disease, after the cause which experience has proved to be the most invariable, namely crowding, has generated it.

This crowding does not necessarily require the presence of a large number, on the contrary, there are numerous instances where the crowding of a comparatively small number created and sustained a high rate of mortality. Dr. McClintock's manipulation of the statistics of the Registrar General, deducting one-fourth or any other proportion for diseases proving fatal in parturition, is entirely unjustifiable because of this one patent fact, that the mortality was determined by the complication of the disease with parturition, and it does not follow that any one of the cases would have proved fatal at all, and certainly not at that particular time, had not parturition been complicated with the disease, or it may be produced the disease, and caused or accelerated the death. I did not assert that metria never occurs in cottage hospitals. The death rate from metria in the Waterford hospital should have been given as 1 in 1,328 instead of 1 in 681. The South Eastern is not an admirable cottage hospital. The Kingstown is an exception. Although the Liverpool hospital is not a cottage hospital, I should be very glad if the Rotundo had the same deathrate.

Dr. Beatty's paper is exhaustive of the subject of the identity of metria and erysipelas, and I regard it as one of the most valuable read in this debate. His support of my views is conclusive, and merits my warmest acknowledgment. He supports my views in regard to there being a common poison in zymotic diseases, and establishes the identity of two, indeed three, ranking pyemia as one. This is one step toward the general recognition of the principle. He modifies his position however when he says that zymotic diseases are not convertible, but in that he falls into the hands of Dr. Stokes, where I leave him. Pathology, however, does not justify the conclusion that metria is merely an erysipelatous inflammation of the peritoneal covering of the pelvic region. Dr. Beatty says the condition upon which the common disease, metria or erysipelas, subsides, is separation, which condition not being complied with, it does not subside, which is my position exactly. On no occasion on which the hospital was crowded was not the crowding succeeded by metria, and the disease was not banished until the numbers were lessened and the separation which he insists on carried out. I explained this on the law of cumulation, a law of metria that will elucidate the duration and development of other zymotic disease. I deny that there have been long intervals of years, sometimes when the largest number of women have been confined in the Rotundo, during which no

metria occurred in it. Only three times has it had two years freedom from it, 1785-6, 1807-8, and 1815-16, and in the other years for which it was free from metria it was only for one year at a time, that the immunity existed. The Rotundo has been for 93 out of the 113 years of its establishment the habitat of metria; and the disease is now endemic in that institution.

If my learned friend Dr. Stokes will read my proposition correctly he will find that there are three instead of two elements in the production of metria, the being a parturient female, circumstances favorable to its imbibition, and the existence of the poison. He overlooked the second altogether. He says contagion is less the cause of metria than epidemic influence, and the proof of epidemic influence is the great fact that women are simultaneously affected. But he begs the question because women are not simultaneously affected. On the contrary, patients are consecutively attacked. Unlike the occurrence of influenza—the best specimen of epidemic disease—which often spreads to hundreds of cases in the course of one day or night, and depends, as we often observe, upon sudden atmospheric changes, metria begins usually by a dropping case, then in a few days another, then the plot thickens as the atmosphere becomes pervaded with the poison, and fresh victims are in the state of receptivity. Again, the influenza disappears or dies out with the alteration of the physical or atmospheric causes that produce it. Not so metria in hospitals, as we have had too painful evidence in what has preceded. Is it, therefore, *more probable* that with this state of consecutive development of the disease, it should not be more ascribable to endemic and contagious than to epidemic causes? He begs the question again when he says, when they have been entirely separated the disease has spread, because this entire separation is the very question at issue. It is wholly impossible to entirely separate a number of people living under the same roof, and who must necessarily breathe the same atmosphere. But Dr. Stokes alludes to the selection made in patients being attacked or contaminated in different parts of the same building, and looks upon this as incompatible with contagion or endemic influence. Why, it is the very essence of its nature, that contagion should charge an inclosed atmosphere and hang about or haunt it, moving from room to room with the currents that invade the building, resting for a time in one from stagnation, and then moving away to another. And here Dr. Stokes' receptivity comes into play in explaining



the selection of its insidious attack. The circumstances are favorable to its imbibition, and the victim is struck. What can be more probable than this? Contrast with it the probability of an epidemic metria, which *does not exist outside*, permeating the hospital, selecting one victim after another, within its walls, say even in distant chambers, and never going beyond the hospital, the disease dying out after a time on the law which regulates these strange variations, and returning in the same manner; and this often occurring, again and again, as I have known to be the case, before selecting a case for attack in the district; these cases in the district frequently traced, as I have done, to the patients of the same practitioner, who was at the moment attending the infected hospital, and thus dying out in the district only to crop up in the hospital again at a short interval; and then let us repeat the question, to which cause, epidemic or contagious and endemic influences, are we to refer hospital metria as most probable? Surely there can be no hesitation, to use Dr. Stokes' own language, that of these two methods of explaining the phenomena, metria, we should accept that which is most probable, and which, with much deference to him, I submit to have thus, on his own text, established to depend upon endemic and contagious, not epidemic, influences. He says that self-poisoning in metria is not proven. But Graily Hewitt says, and there is no higher authority, "It is impossible to escape the conclusion that it consists in nothing more or less than an introduction into the general circulating fluids of a poisonous material of animal origin; that it is a form of pyemia, for the production of which the minutest portion of the morbid agent may prove sufficient; that puerperal fever may occur in the well-marked form, and apart from such introduction from without of morbid material, is undoubted, but in such cases the explanation is virtually the same, the secretions from the surface of the uterus may become fetid, and may also be absorbed, in which case we have the idiopathic disease." Dr. Stokes may not be able to prove that the sun will rise to-morrow, but will he deny it? Will he deny that the principle of self-poisoning does not admit of proof conclusive to the mind of any reasoning man? Can he deny it in empyema? Can he deny it in syphilis? Then why deny it in the case of metria, which, is the most conclusive of all?

Now testing the comparison of proof between the probability of poisoning by atmospheric or epidemic influence, with self-poison-

ing by an inherent generating power in the individual attacked sporadically by metria, when no other case in the district is attacked, who can for one moment hesitate in concluding, after what has preceded on the subject, that the superior number of probabilities—and the compound result of them—go to confirm the self-poisoning; whilst, the force and effect of the circumstantial evidence depending upon the incompatibility of the explanation by atmospheric influence, or in fact, upon any other supposition, reduces anything else to an approximation, to an *argumentum ad absurdum*?

The Registrar General's Department has been sneered at. The labors of the very eminent men who have charge of that most important and useful department are not worthless. Besides Dr. Stokes admits that we are very deficient in accurate statistics as to the mortality from metria in hospitals and private practice. If then the same unreliability and worthlessness extend to all sources of statistics, his objection to the official statistics is of no consequence. He asks, if the mortality in private practice is as great or greater than that in lying-in hospitals, what becomes of the idea that the fatality is in proportion to the number congregated under one roof? He is not generally obscure in thought, but here he has evidently confounded greater in degree with greater in quantity, and no wonder since all the cases of metria he ever had in private practice were fatal, and he does not say that he ever attended any cases of it in hospital. That there is a malignant poison developed in pregnant females, evidence has been adduced over and over in the course of this discussion; and that it is malignant, Dr. Stokes' recorded opinion of the invariable fatality of puerperal fever is the best proof. That pregnancy, or more properly, parturition, is the cause or the source, of it is evident from its being a disease "*sui generis*" only to be met with in pregnant women. As to the analogy between parturition and a surgical operation, denied by Dr. Stokes, I can not conceive any two processes, not identical, between which a fairer or a stronger analogy could be drawn. The reception which this analogy has met from every speaker in this debate who has alluded to traumatic metria, is remarkable. Surely if parturition be a natural process intended by the Almighty to be consistent with life and health, 1 out of 31 should not die in it. Had Dr. Stokes ever witnessed a labor, especially a "*preternatural*" labor, I doubt not he would have changed his mind about the perfectly natural process he makes so light of. If

metria is the endemic fever of Ballarat, prevailing throughout the scattered cottages of the country, being the only prevalent fever of that settlement, it is a remarkable exception. If it could be proven that a certain tribe of American Indians were never free from smallpox, would that be a sufficient reason for sending every feverish child in London to the smallpox hospital, on the ground that he was just as liable to have the smallpox out of the hospital as in it? Any argument in the case before us, based upon Ballarat, is equally as absurd as that.

Dr. Ringland denies my statement that, 3 out of 4 die in the Coombe hospital that should not. With Dr. Kidd's or Dr. Sawyer's or any subsequent return, or with how they may vary, or how effect the deathrates, I have nothing to do. I only know that my calculations were accurate and based upon the authentic paper furnished me by the Registrar of the Coombe. That paper shows the deathrate of the Coombe for the last seven years to be 1 in 72. The mean deathrate of the three cottage hospitals with which the Coombe was compared was 1 in 282. Four times 72 is 282 nearly, or in other words, 1 in 72 is equal to 4 in 282 nearly. If 1 in 282 is a proper standard, and the deathrate of the Coombe is 4 in 282, then it is plain that of every four deaths in the Coombe three are preventable.

It now remains to deal with the subject generally. Ten gentlemen freely admitted metria as contagious. But it must result from the simplest powers of reasoning that every gentleman who has admitted the contagious nature of metria, in however small a degree, must, as a matter of course, and as a consequence of the admission, agree in the truth of twelve of my thirteen propositions, including the three conclusions resulting from them. And the contagionists must go further. They must use their reason, their experience, and their common sense, in testing the value of my apparently adverse statistics, I mean statistics that appear at variance with the principles that apply in all other contagious diseases; and if they find that any collation or coaptation of figures eventuates in bringing out results at variance with reason, experience, and common sense, and with those laws that apply immutably in all diseases of zymotic and contagious types, then they must "hold fast by sound words," and reject the figures as either exceptions which prove the rule, or the explanation of which they are ignorant, or fallacies beyond their detection. Such are the figures, from what quarter soever they may come,



that would go to prove that contagious diseases will not spread, *cæteris paribus*, in a direct ratio to the number exposed to the contagious influence. This, supplementing the effect of crowded houses in producing disease, is, in fact, the gist of the whole question lying at the root of this discussion. If a disease be contagious it can only spread by exposing a susceptible party to the influence of the contagion. If two be exposed the risk is double; four, quadrupled; and so on in an arithmetical ratio. Exactly in the same ratio is the risk in the spread of metria in the larger in comparison to the smaller cottage hospitals, arguments, elaborate treaties, and statistics *notwithstanding*. The invariable rule hitherto with sanitarians, whose ostensible motive is to improve the deathrates, is to place the highest standard before them, and direct their efforts to accomplish this. The rule adopted by my commentators has been to select the lowest standard, and to level down to this. A grievous mortality exists in these great hospitals I care not *where else* it exists if I can prove to you that it does not exist *elsewhere*; if I can show you that human life is preserved in the proportion of 2 to 1 or 20 to 1 in a different place by a different plan from that adopted in the hospitals or places where the mortality exists; and that such a plan is available and practicable, or even not impossible in these also, my case is made. I may say generally that my commentators in this controversy have supported every one of my positions, although they may have caviled at the extent to which I have carried them. When I say cavil, I mean that they have taken objections on points, and failed to grapple with the broad principles. They have attempted to draw the attention of the Society off from the discussion of a great question, boldly, and, I admit, as my friend Dr. Beatty has said, startlingly, propounded, by involving it in a mass of what we shall term discrepancies of detail. They imagine that by showing a want of harmony and exact correspondence in all the collections of statistics they could scrape together, that they can break down the notorious facts which I arrayed before this assembly on introducing this subject, an array of facts, proverbial, and confirmed by the history of the great institutions of Europe from their foundation to the present hour. As to the discrepant statistics adduced by them, their very discrepancy may be said to go a long way in proving the accuracy of mine. The laws of evidence have long established the fact, that want of exact harmony or correspondence in different testifiers is esteemed rather a corrobora-

tion than the denial of truth, a principle that is adduced as well by our ablest theologists in proof of the inspiration of Holy Writ, as by our petty sessions attorneys in the establishment of an alibi. But, sir, it was a primary axiom in my days of pupilage, that "one affirmative proof overturned a host of negative evidence." If the combination of philosophers who have been dealing for months with my propositions, can not reverse this axiom, then I submit that my propositions, and especially that one which has been so much caviled at—the proportion of deaths to numbers and crowding—has been proved, aye, over and over again, by every great lying-in hospital in Europe. Already has this discussion produced good fruit. Attendance at the patients' homes has been encouraged by the authorities of the Dublin lying-in hospitals. The strong and universal opinion, I may say, pronounced upon the contagious nature of the disease, and the attention that has been more especially called to its spread by means of the indiscriminate mixture of the male pupils with the patients after attending autopsies, has, I understand, elicited an order precluding this practice, and thus so far, our common object has been gained, namely, the taking steps to endeavor to lessen the mortality by metria and other zymotic diseases. As I doubt not these precautionary measures will extend to other diseases communicable by contagion, the knight's service rendered by several of my critics upon this point reconciles me to much of their shortcomings in other branches of this inquiry. And if we applied the same principles of preventing the spread of contagion to the other equally important and equally obvious means by which contagion is necessarily spread through crowding together patients similarly affected, under a common roof, there would virtually be no question at issue between us. On the discussion of this subject in the Surgical Society of Paris the following conclusions were arrived at:

1. It has been proved by statistics that the ravages of puerperal fever in lying-in hospitals are greater now than formerly. This can only be referred to the hospital atmosphere; therefore the infirmaries and hospitals should be reduced in extent, and assistance provided for the poor at their own houses.

2. Puerperal fever is infectious; and, therefore, hospitals conducted on the best principles may become the seat of great calamities.

3. Besides the usual sanitary measures which are recommended

for hospitals, special precaution should be observed in lying-in institutions.

4. To avoid importation of disease, strict cleanliness should be observed. Empty wards should be thoroughly cleaned, not only the walls whitewashed, but the beds purified, etc.

5. To avoid the spread of the disease the healthy should be removed from the ward, where any have been attacked, to small rooms for one, or at most four beds.

6. The attacked should be removed to a separate building.

7. If, nevertheless, the remaining females get the fever the whole building must be emptied.

8. In cities where lying-in hospitals can not be dispensed with, they must be small.

You see then while we are discussing this question, it is deciding itself. Nay, it has decided itself; and decided itself, gentlemen, not as should have been the case, *with* the strenuous assistance of those members of the obstetrical branch of the profession who have ranged themselves to oppose my feeble efforts, but in the teeth of their resistance. The enlightened press of England, of Ireland, and of Scotland, has decided this question. It is an accomplished fact. Let the recusants hasten to join in our efforts, or they will rest under the inglorious conviction that they have wedded themselves not merely to an unsuccessful cause, but to one that is being stamped with the just reprehension of the medical and general press throughout this country. The House of Commons is discussing the merits of this question. If, after the experiences, the facts, and the reasonings, and the reliable statistics that have been produced, there be still amongst my hearers and readers more than one man who denies that our large lying-in hospitals can not, and ought not, to be improved in their rates of mortality, and that, even upon the showing of those gentlemen who have taken an adverse line in this discussion, I should like to see him and hear him say so boldly. If there be not, then there is at least one point upon which every man in this Society, and, I might add, every man who knows anything of the subject, out of it, must agree, that is, that a necessity exists for lessening the deathrates in lying-in hospitals. The means of doing that is entirely another question, and one on which there may be as many different opinions as there are individuals present. Taking it for granted, then, that a necessity exists for an improvement, it may be further affirmed that every one of the recusants who car-



ried, as one of them pugnaciously remarked, "war to the knife," against my inquiry—the hospital physicians and their congeners who admitted so many of my propositions, and confirmed the real basis of my arguments—and the general listeners, including the sons of Korah, who have exhibited such patience and zeal in sitting out the nine nights' discussion; I say, it may be affirmed that every one of my hearers and readers who has arrived at the above conclusion, and who, as far as in him lies, does not endeavor, from this moment, to correct it, is assisting in sustaining that deathrate. Do not deceive yourselves, gentlemen. He is not merely in the position of an accessory after the fact; he is from this day out an accessory before the fact. And what is the fact? It is the taking away of life—precious life, a gift that none of us can restore. The law recognizes two descriptions of responsibility—that by commission and that by omission; and culpability attaches as well to the last as to the first. I now say, and say with deliberation, that every one of us who possesses the power, by act, word, or deed, of preventing this unnecessary loss of life, and who exercises his influence against that prevention, or omits to exercise it for it, is morally in one or the other of these positions.

It is doubtful whether those gentlemen, my critics, whom I have not specially answered may not be more dissatisfied with my breach than my observance of this mark of respect. Should such be the case, I can only apologize to them in the words of Napoleon I, in bidding farewell to his army on leaving France for Elba: "Soldiers, would that I could embrace you all! As this is impossible, I salute your generals." Expressing my apologies for the imperfect manner in which I have discharged this great duty, and my thanks for the patience with which you have borne with me, I would exhort you to apply the knowledge elicited in this debate, and that without delay, for in the words of America's great poet:

"Man-like is it to fall into sin,  
Fiend-like is it to dwell therein."

*Art. V.—Notes of a Case of Brain Disease.*

Reported by DR. F. J. MILLER, West Union, Ohio.

J. K. B., aet. 25; height, 5 feet 10 inches; weight, 165 pounds; had been healthy and robust until the age of sixteen. In summer of 1861 contracted a cold, while at work on a farm in Illinois, which left him with a stubborn cough; came home to Ohio in the fall of 1862, and engaged for brief periods as daguerrean artist, clerk in store, etc., until the fall of 1863, when he enlisted in the army, being at the time somewhat debilitated, and still laboring under the cough before spoken of, the surgeon only passing him upon his own urgent solicitation and that of the recruiting officer, telling him that he would inevitably die in the army. This prediction, however, was not verified. He soon apparently recovered, gaining flesh and strength very rapidly. The only thing he encountered, while in the army, from which he suffered materially, was upon one occasion being nearly frozen, three of his comrades being at the same time frozen to death. Discharged in July, 1865, looking finely, but, as he said, not having felt very well for a few weeks. Followed no regular business afterward. Tried several occupations, but invariably gave them up in a few days or weeks, and I believe the only symptom up to the winter of 1868-69 was that he was always ready to commence something new, and just as ready to abandon it; was entirely destitute of any fixed purpose or any thing like perseverance. In the winter of 1868-69, he had a succession of severe chills, occurring daily, followed by fever, and continuing about a week. Soon after, this strabismus of the right eye was noticed, the sight of that eye also being somewhat impaired. He complained of sharp lancinating pains in various parts of the body, head, chest, abdomen and limbs. (About this time an engagement of marriage was broken off, in consequence of the evident failure of health, which affected him deeply.) Mind became vacillating; seemed not to have perfect control over the voluntary muscles; gait, unsteady and tottering, and all his movements irregular and jerking. For a time this was attributed

to drink by those who merely saw him upon the street. The testimony of all his intimate friends shows, however, that, although he had indulged pretty freely some time before, he had entirely ceased, and it must have been caused by a loss of co-ordinating muscular power. A notable increase of flesh was at this time taking place, weight increased to 190 pounds, without any amelioration of the symptoms, however, but rather an aggravation. At the present time his weight is about the standard of health, 165 pounds; appetite good; pulse seventy; sight impaired especially in the right eye; right eye completely, and left partially paralyzed; sense of taste, touch and smell impaired. All his movements are irregular, jerking and spasmodic; is unable to walk without support. In all his attempts to do so, he invariably falls at the second or third step, or rather begins to fall at the moment of starting. His father is sometimes in the habit of supporting him, and indicating in a loud, firm voice which foot he must bring forward, left! right! etc., in such a manner as to keep his attention entirely upon his own movements, and, in this way, he can walk considerable distances and with a good degree of firmness. He has, at some times, retention, and at others incontinence of urine, and imperfect control over sphincter ani; is able to resist flexion or extension of the right arm and leg with much more than normal power; sleeps at least half the time; mental faculties pretty clear, but I think I could not say entirely so.

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DR. CHARLTON, of the Newcastle Infirmary (*Brit. Med. Journal*), has found creasote so uniformly successful in checking the vomiting which sometimes occurs in Bright's disease, that he has diagnosed this malady where other symptoms were absent, by the cessation of vomiting under that remedy. As another diagnostic sign he states that "tenderness on pressure of the pneumogastric in its course through the neck is evidence of inflammatory disease of some of the organs to which it is distributed, whether it be stomach, lung, spleen, liver, or kidneys." If only one side be affected, the nerve on that side will alone be tender.



## Medical Societies.

## CINCINNATI ACADEMY OF MEDICINE.

WM. CARSON, M. D., PRES'T.

J. T. WHITTAKER, M. D., SEC'Y.

*Obstetrics—Menstruation.* Dr. Whittaker, from the section on obstetrics, reported upon menstruation, showing a specimen of fresh corpus luteum from a patient dead with acute pleurisy. The corpus luteum was fully developed in the right ovary. Both tubes, the broad ligaments and the mucous membrane of the uterus, were congested. Free blood was not yet manifest. The left tube was bound down by false adhesions to the posterior surface of the uterus. Traces of old corpora were present in the left ovary. The shape of the uterine cavity, marked the patient as a para. The connection between ovulation and menstruation was remarked with the possibility that either may exist without the other. From observations by Raciborski it was settled that menstruation appeared between thirteen and sixteen years, the difference being due to climate and temperature. Thus from four to eight degrees in latitude established menstruation about one year earlier. The degrees could not be given with exactness, because isothermal lines were not in correspondence; six degrees temperature alone, making a precocity of seven months. The influence of caste was shown. As to the effect of the disease upon menstruation, Raciborski, who had studied the subject as a specialty, remarks that acute pleurisy exerted none: menstruation appearing as usual. The case presented is one in substantiation. As to the probabilities of conception, the same author differs radically from most others in that he claims that the menses only appear after the ovum is lost; hence this period is the most unfavorable for its occurrence.

*Puerperal Mania.* Dr. Ludlow reports a case. Midnight of yesterday, he was called to a patient, whose history stated that she had been sick for five days with mental derangement; speech was

incoherent and irrational. Noticing an infant near, he surmised the character of the case. The pulse was natural, the body and extremities cold, the eyes open, with a vacant stare; bowels had not been moved for three days. Ordered, croton oil gtt. i; also, potass. bromid. grs. xxx. and pot. ammon. v grs. every three hours; beef tea. She had no sleep for seventy-two hours, nor rest for three days. The babe was six months old. At 5 A. M., she had not slept, but was quiet. The same treatment was continued at intervals of  $1\frac{1}{2}$  hours. When he again called, he found her by the window. At 3, she fell asleep for two hours. At 9, this morning, the general condition was about the same. Hydrate chloral ordered; the first dose of grs. xv produced a condition of hilarity; the second dose, in fifteen minutes, drowsiness; the third, at the same interval, sleep after some hysterical manifestations. This continued for three hours. This afternoon, at 4, she was in good condition; the chloral was discontinued, and the bromides resumed. Two physicians previously called had pronounced it lunacy. Dr. Ludlow then remarked further upon the symptoms, time of appearance, and prognosis of the disease. In answer to Dr. Tate, he remarked that the pulse was seventy-five, except when under influence of chloral it was 112. As to family predisposition, he was unable to ascertain.

*Dr. Tate* remarked that the gravity of these cases is generally indicated by the inability to sleep and the frequency of the pulse. Until recently, nothing new had been presented in its treatment. A few weeks ago, a case presented itself in his practice, during lactation, at about the sixth month. She was a woman of vigorous constitution, without any hysterical manifestations; she had been excited, however, by occurrences in the vicinity. Mania followed; the affection was of three days' duration, when he was called. Bromide of potassium was ordered and continued three days. Meantime she slept but one or two hours. Hydrate of chloral was ordered, and secured one or two hours' sleep. On awakening, the pulse which had been of good force and never over 120, was unchanged. Neither of the two remedies exercised any particular effect. He advised that she be sent to Long View Asylum. Chloral he regards as a valuable addition to *materia medica* in these cases, though not very satisfactory in this instance.

*Phthisis.* Dr. Logan presented two cases of phthisis, a man and a boy. The first when seen two months ago, had been given up by two physicians; he is now able to pursue his avocations. The treatment was that mentioned in the essay presented at the last meeting. The boy had also materially improved; the anemia, at first profound, had nearly vanished. He has constantly been taking iron during the year of treatment. In answer to Dr. Dawson, the speaker responded that he had given the iron in the form of the tinct. ferri chl., gtt. xxx ter die.

(A recess was taken to examine the cases.)

Dr. White stated the result of his examination. The young man presented prolonged expiration on both sides, with but little difference in percussion dullness. In the man there was decided feebleness of respiration with diminished expansion of both apices.

Dr. Logan then proceeded to read the history and symptoms of a dozen other cases, treated by the same method. In all but two or three there was marked improvement. Two had died; one was almost moribund when treatment was commenced, the other had long since ceased medication. Drs. Orr, Bonner and Stevens had examined these patients, and confirmed his diagnosis.

Dr. Carson stated the result of his examination in one of these cases—a female. He remarked that there was dullness on percussion, feebleness of expansion, and high pitched respiration at the left apex. He believed the disease still present, though, from the history, there was a decided improvement.

Dr. Ludlow questions the accuracy of the diagnosis in the cases reported by Dr. Logan, remarking upon his presumption in stating that tuberculous matter could be eliminated, and the lungs entirely restored to a normal condition. Dr. Ludlow claims also that the treatment is not new. He had himself employed the same treatment. He remarked also upon cases in his own practice improved by the daily administration of quinine.

*Gunshot Wounds.* Dr. Young reported two cases of old gunshot wounds. In one case the ball passed into the inner side of the tibia, which it splintered. After healing of the wound, suppuration ensued. Several spiculæ of bone were removed after the discharge of the pus, by incision, with no further difficulty.

*Puerperal Convulsions.* Dr. Palmer reported two cases of puerperal convulsion, with a commentary. Mrs. S., æt. 20, large,



strong, plethoric, œdematous lower extremities; convulsions on the evening of the 27th May; delivery at 3 A. M., 28th; previous to this several convulsions. Dr. Goode bled her  $2\frac{1}{2}$  pints, and ordered potass. bromid. When Dr. Palmer saw her, she was breathing slowly and irregularly. The pulse was full and strong; bleeding one pint repeated. A cathartic of calomel and croton oil prescribed. The convulsions diminished in number and severity to complete cessation after the operation of the cathartic. Child living.

Mrs. D.,  $8\frac{1}{2}$  months in first pregnancy; first seen in second convulsion, Thursday,  $5\frac{1}{2}$  P. M. Lower extremities and face œdematous, bowels opened, urine scant from first month, pulse 85, full strong and regular, os dilated to half-dollar, high in the pelvis, bladder evacuated by catheter, urine albuminous. Ordered chloroform inhalations, venesection Oj; purgation; chloroform was given freely. A fourth convulsion supervened by its accidental intermission. After 5 P. M., bled Oj, with relief. Dilatation proceeded favorably, until 5:25 A. M., when birth occurred. One convulsion at delivery, another at 7, shorter and lighter. This case occurred in the care of Dr. McMechan, and was also seen by Dr. Wright, who approved of the treatment. Dr. McMechan had stated that the case was a footling; there was delay with the head which was delivered with the forceps. Bleeding in such cases, he remarked, is not practiced because they are cases of convulsions; but to relieve the excess of blood as well as to alter its quality, chloroform is given freely and continuously, as, according to Thomas, chloroform is not so likely to kill as the convulsions. Bromide of potash acts most efficiently on the brain and nervous system. Opium is better adapted to anemic nervous women, but quoted Elliot against its use hypodermically.

*Case of Encephaloid Disease.* Dr. Muscroft read the history of a case of left hip joint, filling the entire pelvis and part of the abdominal cavity. J. Herbel, age 27, tailor, complained of pain in the left hip; present a pale, blue, firm tumor, of the size of a hen's egg, just below Poupart's ligament, and extending into the pelvic cavity. Manipulation does not increase the pain. Decubitus on either side. It was considered a case of coxalgia at one time; earlier, one of rheumatism in the ankle and knee, where pain was experienced. First indisposition, Dec. 25; previous good health. Shortly after first visit, retention of urine supervened,

circumcision was performed on congenital phymosis, great obstruction detected at the neck of the bladder. Left index finger in the rectum discovered a tumor in the left side of the pelvic cavity of firm parchment feel. When the catheter was introduced, its orifice pointed to the left thigh, its point being in the right iliac fossa. The diagnosis was now established. During the very rapid growth of the tumor, several gentlemen in consultation confirmed the diagnosis. Toward the last, the left leg and thigh became very œdematous, great trochanter and upper portion of femur subcutaneous. Decubitus left, lateral, with flexed limbs. Death, June 3. Three weeks under treatment; whole duration of disease five months and nine days.

*Dr. Carson* presented the specimen of this case. A cancerous mass of the extent mentioned, affecting also the head of the femur, having destroyed the round and capsular ligaments, and extended into the acetabulum. A small portion of the left side of the pelvic cavity was occupied by the displaced rectum and bladder. The ureters were enlarged to  $\frac{1}{2}$  inch diameter. The explanation of the subsequent loss of pulsation of the femoral arteries was found in the fact that the iliacs were imbedded in the tumor. The nature of the growth was perceptible on microscopic examination. There was also considerable fatty degeneration and some osteoma, not enough of the latter, however, to characterize the growth. The muscles of the thigh presented the peculiarity of colloid degeneration from pressure—being pale, flabby and translucent. Œdema was marked. The angle of the shaft was abnormal. The left sacro-iliac junction where the disease is supposed to have originated was separated. Other organs were not affected.

7 In the discussion of this case, Drs. Young, Muscroft, Stevenson and Carroll made remarks with cases, chiefly with reference to the implication or escape of distant organs in the progress of this disease.

## Correspondence.

*Corinth, Miss., May 10, 1870.*

Prof. E. B. STEVENS:—I propose to record as well as make observations, and if this my first is of value, use it; if not you have a place for it among waste papers. A baby sits before crawling, walks before it runs, etc., but I propose this my first before entering the profession proper. After receiving my medical degree in March, '70, armed with a few drugs, some books and a horse, I sallied forth to commence the struggle with disease, the enemy of my race. Arrived at this small city, April 14, which numbers about fifteen thousand, not souls, for sad to say, about twelve thousand of that number are buried federal and rebel soldiers. Soon after my arrival I was invited to visit a patient by a resident physican with mani-à-potu. The physician was suddenly taken ill, and the sick man passed into my hands, more than I thought to bargain for. I evacuated the bowels, and for two days gave him bromide potass. without benefit; then the opium treatment for three days, to the extent of the books and lectures (as I thought), the prognosis becoming constantly more unfavorable; the patient several times escaping from the hotel, hiding in closets, etc. Failing to find chloral in the city, I broke into my little box of drugs and gave him a ʒ chloride chloral; in a half hour he was stertorous; the sleep was profound, to me alarmingly so; it lasted thirteen hours, during which time I watched him in person, occasionally shaking him to make him expectorate, as the pipes seemed badly loaded. After this protracted sleep he awakened convalescent; ten grains more chloral secured a pleasant sleep, and in two days more he went his way rejoicing.

Respectfully, etc.,

F. R. VAN EATON.



*Truth Mount, August 2, 1870.*

E. B. STEVENS, M. D., EDITOR:—Please insert in your journal the following extract from an old author. It is a life-like penciling of some people, including some editors. It may do them good, “beholding themselves as in a glass”—*looking-glass!*

“O! that the Gods the gift would give us  
To see ourselves as others see us.”

VERITAS.

“To speak and to offend, with some people, are but one and the same thing; their words are fraught with gall and wormwood, from a proud, splenetic, and malevolent disposition; it had been well for them, had they been born stupid or mute; *the little vivacity and wit they have prejudice them more than dullness does others.* They are not always satisfied with giving sharp answers; *they insolently attack the present, and wound the character of the absent;* they bristle up and butt on all sides like rams; and *impudence* being as natural to them as horns to the ram, *no ridicule, no satire,* can work upon these *untractable savages.*

It may be well to consider the following: Let every one, in the language of Montaigne, dive into his own bosom, and he will find his private wishes spring, and his secret hopes grow up, at another's expense. Upon which consideration it comes into my head, that nature in this does not swerve from her general polity; for physicians hold that the broth, nourishment, and increase of everything is the corruption and dissolution of others.”

## Editorial.

*Medical Teaching in Cincinnati.* It will be of great practical interest to students of medicine, and practitioners desirous of cultivating any of the special departments of clinical surgery and medicine, to visit this city. There are very few cities which can afford so good facilities for acquiring a sound medical education. There are numbers of gentlemen who are cultivating the *art of teaching* engaged in giving didactic instruction with abundant resources for illustrating their several branches, and certainly the completeness of the Cincinnati hospital with its *daily clinics*, gives remarkable opportunities for the practical study of disease and its treatment. There were a large number of students in attendance on the lectures of this city last winter, and we have reason to anticipate an increased number the coming session. In addition to these excellent advantages, so well understood by earnest students, Cincinnati is in every respect a desirable city in which to spend a winter. It is remarkably healthy; the expense of living is moderate; and the religious and literary advantages very choice.

We hope too that students, and their preceptors for them, will see the importance of coming to the city promptly by the 1st of October, calculating to devote five months to business, and to make the most of the time. Students who come a few weeks after the opening days of the term—make a long holiday vacation—and go home a week or two before the close of the session, have practically almost wasted their outlay of time and money. There is really so much to do, and so little time to do it in, that the ambitious physician in the later days of his life never regrets but once this frittering away of college days and hospital opportunities—and that is always.

*Diploma Fees.* Most all colleges, we think of no exception, make a handsome addition to their income by the large amount charged for diploma fees. Hence there has always been a complaint of the temptation to graduate men unfit for the degree; and

hence, too, the demand for separating the functions of the teacher and the power of granting degrees. We have always thought the practice of charging a fancy fee (\$25 in most colleges) for the diploma an absurd one. As in every way more just, and thus also removing all temptation for the improper granting of degrees, we suggest the propriety of *abolishing the diploma fee*, except perhaps an amount that will merely cover its cost as a printed parchment. To compensate for the loss of income to the schools, let them agree to add 25 to 33 per cent. of the present diploma fee to the regular price of the tickets—this will just about meet the difference, and then we shall have removed one of the chief stumbling blocks of reform, besides entering upon a more equitable plan of fees.

***Hospital Library.*** The last General Assembly of Ohio so amended the laws governing the City Hospital of Cincinnati, as to provide that all fees received by that institution be appropriated for the book-plates and means of illustration. We shall thus very soon have the foundation of a magnificent hospital library. The library is to be placed in the new Public Library building in this city, where spacious apartments will be appropriated. This library will be free for consultation to all who choose to make it available. Thus we shall have another added to the rapidly accumulating professional attractions of this city.

At a recent meeting of the trustees of the hospital, Dr. W. B. Davis proposed that the staff be requested to prepare an annual volume of reports. The proposition was cordially approved and referred to the staff. We are greatly pleased that this movement is started, there is a large amount of valuable clinical material going to waste that ought to be systematized and utilized. We only regret that the staff seem disposed to defer the issue of the first volume until March, 1872. The material is rich and abundant, and as we have a long winter before us for work of that sort, the first volume ought to make its appearance March, 1871. We trust to be able soon to announce that such will be the case.

***Health Reports in Cincinnati.*** We select the following important facts and reflections from a recent report made by Dr. Clendenin the health officer of this city. Quite a number of the points will be found worthy of study elsewhere than in Cincinnati.



*A Comparison.*—The mortality during July was 94 more than during the preceding month of June, and 98 more than the corresponding month last year.

The following shows the mortality in the city each month during the present year, also the deaths in July in each of the last five years :

<i>Months.</i>	<i>Deaths.</i>
January.....	325
February.....	272
March.....	333
April.....	311
May.....	316
June.....	409
July.....	503
July, 1866.....	337
“ 1867.....	392
“ 1868.....	630
“ 1869.....	395
“ 1870.....	503

*Deaths in July from Summer Complaints during four years.*

	July, 1867.	July, 1868.	July, 1869	July, 1870.
Cholera Infantum.....	78	104	57	80
Cholera Morbus.....	4	4	5	15
Diarrhea.....	13	49	19	21
Dysentery.....	10	34	13	5
Totals.....	105	191	94	121

*Facts.*—In New York, in 1810, one-half of all the persons who died were twenty-four years of age and upward; in 1820, half of the deaths were of persons only twenty years of age; in 1830, ten years of age equally divided the number of deaths; in 1840, half of all who died were only five years old; in 1850, at four years and under were half the deaths; in 1857 half the deaths were of children two years old and under.

One-half of all the deaths in Philadelphia, in 1807, took place after the twenty-fourth year of age; in 1820, half the decedents were not yet twenty years old; in 1830, half the deaths were under sixteen years old; in 1850, half the decedents were under five years of age, and in 1856, one-half were under four years of age.

*How in Cincinnati?*—During the four years ending February 28, 1870, there were reported to the Health Office in this city, 17,983

deaths as having occurred in that time. Of this number, 8,659 were children under five years of age, or nearly one-half; and of these nearly eighty per cent. were under two years of age.

*Alarm.*—Are these things so? Is this rate of destruction of human life necessary and inevitable? Will not parents demand something more than a mere statistical statement of the causes? And is there nothing in all this to interest public attention, and to awaken the sympathies and arouse the energies of our law makers?

How common it is in case of death, especially the death of a child, for the friends and the physician also to consider that it was inevitable—that it was the result of causes none could have foreseen or prevented. This blind submission to what is too often regarded as the will of the Creator may be to some a source of consolation, but such thoughtless ignorance has sacrificed the lives of thousands of men and women, and of tens of thousands of little children.

This mortality is in some measure to be attributed to hereditary causes, but an investigation of the diseases most common and most fatal among children, show that they are controllable and preventable; that is, they are due to preventable circumstances.

*Disease due to a combination of causes.*—A popular fallacy is that one cause precedes and originates disease, when the fact is that it is due to a combination of causes. During the four years ending March 1, 1870, of the 8,659 children that died under 5 years of age, 1,198 died of cholera infantum, the common summer complaint of children; of convulsions, 1,299 of this class died during the same period; of other bowel diseases, were 889 deaths in the same category, while there died from inflammation and congestion of the brain 583; diphtheria, 186; croup, 207; whooping cough, 167; smallpox, 588; scarlet fever, 107; measles, 161.

Bowel and brain disease cause most of these deaths, and as these are most common in summer it is plainly to be inferred that heat is one of the influential causes of these diseases. Of bowel and stomach diseases another cause is improper diet. The most potent cause is foul atmosphere produced by decaying filth, bad drainage, obstructed sewers, cesspools, putrefying excrement, and, above all, overcrowding of human beings in tenements. Children living in most crowded portions of the city and in most crowded tenements suffer greatest, while children in the country suffer very little from the above diseases. From this the natural inference is,

that the heat is by no means the sole cause of this infant mortality. For the same reason we may conclude that fresh natural ripe fruits eaten in moderation are not the cause of the above diseases.

Only when the system of the child is prepared for disease by bad air, does teething have any danger. The foul air of badly ventilated houses in narrow and crowded streets causes a thousand fold more mortality than fruits, vegetables and teething.

*Startling.*—The children of the poor suffer most from summer complaints. Our city in its original limits is the most compactly built city in the United States, and, in proportion, has as many tenement houses as New York, viz.: 1,410, each containing six families and upward. These houses contained 16,197 rooms, and were occupied by 9,894 families, with a population of 38,721 persons. Of these there were 4,218 families occupying each one room, in which to cook, wash their clothing, sleep, etc. Of these there are 3,571 with but one window each, and no other means of ventilation. The infant occupying such a room has but a small chance to escape disease, and, getting disease, has but a small chance of life.

*The Remedy a Park.*—The district physician in vain prescribes pure air to the mother who can not afford it. The mother has no rich friend, and the child can not be taken to the country, so must die. There is now no place provided by the city where this mother may go and get pure air for her dying child. The need is for a place where the child might be taken daily and obtain fresh air. This would save many hundreds of lives annually.

CINCINNATI, July 29, 1870.

The undersigned having acted as the friends of Drs. Thacker and Dawson in adjusting the recent difficulty between them, have heard that erroneous statements are in circulation with regard to the matter. They therefore deem it necessary to publish this card stating that the difficulty was settled in a manner satisfactory and highly creditable to both of them.

ROBERTS BARTHOLOW,  
A. S. DANDRIDGE.

*Wanted to know*, who paid \$9 on account of this journal about the 20th of July. The party had his bill receipted by a member of the family who neglected to take the name and address



until he had left the house too far to recall—hence there is no credit on our books.

***Uterine Inertia overcome by Manual Distention of the Perinæum.*** By Dr. Van der Meersch. The distention of the perinæum, by the pressure of the child's head, excited by reflex action, increases uterine contractions, a fact which all accoucheurs have verified. The application of the forceps, by the distention of the vulva and the perinæum which it causes, always gives the same result. Dr. Van der Meersch, having had his attention called to these facts, has employed, for some years, and with great advantage, a method which brings about the same result. When, toward the end of labor, the pains begin to grow feeble and at last to disappear entirely, whether the membranes are broken or not, the cervix more or less obliterated, he excites them anew by introducing the right index and middle fingers as far as the head of the child; then separating the fingers to the distance of four or five centimetres, he applies the tips to the recto-vaginal wall against which the head should be pressing, and then draws them gradually toward the external orifice, pressing against the wall so as to exercise a decided distention of the perinæum. Repeated several times successively, especially at the period of a pain, this little manœuvre brings about rapid and effective contractions, in place of infrequent and feeble ones.—*L'Union Médicale*, May 14.

The method of Dr. Van der Meersch is not unknown among us, but has been employed by accoucheurs in Boston for many years.

***Ichthyosis.*** Mr. George Naylor says that local means are of great service in the treatment of ichthyosis. Glycerine, in the proportion of six or eight ounces to thirty gallons of water, at a temperature of 96°, is a useful bath, and twice or thrice a week, or, as this is costly, after using a common warm bath, the whole surface may be spread with a quart of warm water containing two ounces of glycerine, or, lastly, glycerine alone after a bath. When scales are very thick, rub them off with pumice stone. Internally, iron combined with aperients.—*Dublin Medical Press and Circular*.

***University of Edinburgh.*** Dr. Alexander Simpson, nephew of the late Sir James Y. Simpson, has been elected to the Chair of Midwifery in the University of Edinburgh.

*Remarkable Case of Insatiable Appetite.* Perhaps the most extraordinary instance, says *Nature*, of excessive and depraved appetite on record is that of a French soldier, named Tarare, whose case is described in vol. xxi. of the *Dictionnaire des Sciences Médicales*, by Dr. Percy. He was born near Lyons, and came up to Paris, where his first exploit was to eat a basket of apples—at a friend's expense. On various occasions he swallowed a series of corks and other indigestible materials, which produced such violent colic that he was obliged to attend the Hôtel Dieu, and while being examined almost managed to swallow the watch-chain and seals of the surgeon in attendance, M. Giraud. Desault, on the occasion of one of these attacks of colic, tried to frighten him out of his gross habits by declaring that it would be necessary to open his stomach, and arranged the instruments; he ran away and relieved himself by copious draughts of warm water. Soon after he found that his appetite had really increased to an excessive amount, probably owing to the continued irritation produced by these absurd tricks. At seventeen years of age, when only weighing one hundred pounds, he could eat twenty-four pounds of beef in as many hours. He now entered the army, and being recognized by the Surgeon-Major, M. Courville, of the 9th regiment of Hussars, he was detained for the sake of curiosity. From the day of his admission, he was ordered quadruple rations, with pickings and waste meat, but often slipped into the dispensary to finish off a poultice or two. One day he was observed to seize a large cat, and after sucking its blood, left, in a very short time, only cleanly picked bones, the hair being ejected in the course of about half an hour, like other carnivora. He was fond of serpents and eels, swallowing them whole. On another occasion he consumed in a few minutes a repast, spread out for fifteen German work-people, of milk, etc., after which he was blown out like a balloon. In the presence of some officers he swallowed, at one sitting, thirty pounds of liver and lights. His insatiable appetite was for once in his life made useful, by his being selected to convey a correspondence between General Beauharnais and a French colonel, which was inserted in a box and swallowed; but he was caught and soundly thrashed. He fell under suspicion of having eaten a child fourteen months old. It is stated that he was of mild and gentle manners and aspect. After death his stomach was found in a very diseased condition.—*Dublin Medical Press and Circular.* .

**Nitrate of Amyl.** A correspondent of the *New York Medical Gazette*, says: Guthrie, who investigated the properties of the nitrate of amyl after the discovery of it by Balard, proposed it as a resuscitative in drowning, suffocation and protracted fainting. It would seem worthy of a trial in the threatened syncope from chloroform; since the inhalation of but a few drops is followed by marked acceleration of the heart and flushing of the face. The writer poured about eight drops upon a towel, and, as an experiment, snuffed it two or three times, when immediately the radial pulse became accelerated, the heart throbbed with much force, and the pulsation of the cranial vessels became almost painful. At the same time there was a decided tingling of the ears. The symptoms lasted but a few moments, the tingling remaining after the circulation had become quiet.

**M. Auzias-Turenne.** This indefatigable inventor and propagator of syphilization has just died at Paris, and is much regretted by his friends. Although he defended a system of treatment condemned by the great majority of medical men, he can not be denied the merit of originality and perseverance. The deceased acted in perfect good faith as regards his theories, and honestly defended what he believed to be true. He had often been taunted with refraining from applying his remedy to himself; but he was always silent on the subject. But it was found, say the medical papers, that he had a great number of scars upon his body, caused by inoculations of chancres. He was buried, according to his wish, without any religious rite; and he has directed in his will that his body should be dissected, and his skeleton, carefully set up, be offered to the medical faculty of Christiania, where his doctrines had, in Dr. Boeck, found such a powerful advocate. M. Auzias-Turenne, unlike many promulgators of new medical doctrines, was not in good circumstances, and has died poor.—*Lancet*, June 18.

**The Physician's Equipage.** In Queen Ann's reign, no physician with the slightest pretensions to practice, could manage without his chariot and four, sometimes even six horses.

**A New Medical Journal** to be known as the *Medical Times* will commence its existence in Philadelphia on the 1st of October prox. It will be a quarto, 16 pages of reading matter, and issued semi-monthly—for \$4 a year. J. B. Lippincott & Co. will be publishers. Its editorial management is not announced.



***Abernethy's Dislike to Unnecessary Talk.*** People who came to consult this eccentric man took care not to offend him by bootless prating. A lady on one occasion entered his consulting room, and put before him an injured finger, without saying a word. In silence Abernethy dressed the wound, when instantly and silently the lady put the usual fee on the table, and retired. In a few days she called again, and offered her finger for inspection. "Better?" asked the surgeon. "Better," answered the lady, speaking to him for the first time. Not another word followed during the rest of the interview. Three or four similar visits were made, at the last of which the patient held out her finger free from bandages and perfectly healed. "Well?" was Abernethy's monosyllabic inquiry. "Well," was the lady's equally brief answer. "Upon my soul, madam," exclaimed the delighted surgeon, "*you are the most rational woman I ever met with.*"—*Jeaffreson's Book About Doctors.*

***Celibacy in Women.*** Dr. Maudsley, in his third lecture at the College of Physicians, says: "Sexual hallucinations, betraying an ovarian or uterine excitement, might almost be described as the characteristic feature of the insanity of old maids, the false visions of unreal indulgence being engendered probably in the same way as visions of banquets occur in the dreams of starving persons, or as visions of cooling streams to one who is perishing of thirst. It seems to be the fact that, although women bear sexual excesses better than men, they suffer more than men do from the entire deprivation of sexual intercourse." This may be quite true, but, of course, it is rather difficult to prove it. Many persons connected with asylums have told us that male epileptics are more frequently thus affected from masturbation than females; and how does Dr. Maudsley know that celibates don't masturbate?

***Another New Medical Journal.*** A new monthly medical journal, hailing from St. Paul, Minn., containing twenty-four pages—of which fifteen pages are devoted to original papers, has been received and placed on our exchange list. It is to represent the Profession of the northwest, and is ably edited by Alexander J. Stone, M. D., of St. Paul.

***Who has my volume*** of Transactions of American Medical Association for 1869? I want it. E. B. S.

***A Simple, Cheap and Efficient Substitute for the Stomach Pump.*** About a year ago, I had a case of stricture of the cesophagus so narrow that my patient could not swallow even liquids. To sustain life I resorted to a small stomach tube, (a gum catheter, in fact), as a means of injecting liquid nourishment; to this I fixed the elastic tube of one of Davidson's syringes.

On one occasion the vessel containing the liquid happened to be higher than the patient's stomach and I observed while the syringe was not being used, that the liquid continued to flow into the stomach—the action being that of a syphon. I at once, to test the syphon, substituted a simple elastic tube for the syringe, and found the stomach could be as readily emptied as filled. Thus I conceived the idea of using a syphon instead of a stomach pump, and have used the same in a case of poisoning recently with the most complete success.

I attach four feet of India rubber tubing to a stomach tube, fill both with water by simply dipping it in the liquid end first, then compressing the elastic tube between the thumb and finger to keep the fluid from running out, introduce the stomach tube, lower the outer end of the elastic tube, and the contents of the stomach pour out as readily as if from an open vessel. When the fluid ceases to flow, I dip the outer end of the tube beneath the surface of water, elevate the vessel containing it, and the stomach is soon filled; lower again the outer end of the tube and the stomach is emptied. This can, of course, be repeated as often as is necessary.

The advantages claimed for this simple contrivance are, that it may be almost always improvised, is of speedy and easy application, has no valves to become obstructed or deranged, and is less expensive than a stomach pump.

The same principle may be applied in injecting fluids into the bowels, as indeed it has been for injecting into the bladder, uterus and vagina.—*St. Louis Medical and Surgical Journal*, June 6.

***A New Method of Preventing Lead Poisoning.*** A communication on this subject has recently been read to the Paris Academy of Medicine, from the director of one of the principal glass manufactories in France. In the establishment minium is prepared in large quantity, and, in spite of every precaution, the workmen infallibly succumbed to lead poisoning in a longer or shorter period. Two workmen only, who had been in the habit of drinking a quantity of milk every day, escaped the disease. This

fact attracted the attention of the director, who put all the workmen in the place on similar diet. From that time, February, 1868, not a single case of colic has been observed.

***Whooping Cough Treated by Chloral.*** By Dr. A. FERRAUD. Dr. F. had three patients in one family with whooping cough, which he had treated unsuccessfully with various remedies. He then tried chloral, which he gave in syrup, in the proportion of 2 grammes to 150. In each spoonful of the mixture there were 25 centigrammes of chloral. The first three days two spoonfuls were prescribed for each evening, were not regularly given, and only the tolerance of the medicine was established. Then three spoonfuls were prescribed and were regularly given. Now there was an abrupt and favorable change. Instead of three or four attacks of coughing, with vomiting, in the course of each night, there was unbroken and refreshing sleep. In the morning, on awaking, there was an attack of the cough for a few days, which soon disappeared. Recovery was rapid.—*Boston Medical and Surgical Journal*.

***Chloral in Asthmatic Bronchitis.*** Dr. CASPAR MORRIS says: "I was recently in attendance upon a lady who suffers from frequently recurring attacks of bronchitis, with asthma. The skin was hot, the frequency and difficulty of respiration very great, the rales loud and musical, and the secretion very profuse, so that the mucus could be poured from the cup in an abundant, ropy stream. My attention has been arrested by the account, recently published, of the hydrate of chloral, and as she had not been relieved by any remedy which I had previously tried, except to a slight degree by chloric ether, it occurred to me that the chloral might be of service. I ordered five grains in one fluidrachm of the syrup of lactucarium of Aubergier, to be repeated in two hours if required. The two doses afforded entire relief; and she has found great comfort since from a single dose taken at bed-time; a good night's rest being secured by it. I mention it as a valuable aid in the treatment of this intractable and distressing disease.—*Trans. Coll. Phys. Philad.*; in *Amer. Jour. Med. Sc.*, April, 1870.

***The Medical College of Ohio*** has suffered a loss in its faculty by the resignation of Drs. M. B. Wright, Emeritus Professor of Obstetrics; C. G. Comegys, Professor of Clinical Medicine; and Edward Rives, Professor of Physiology. Dr. James T. Whittaker has been elected to fill the vacancy occasioned by the resignation of Prof. Rives.



***Confluent Small-Pox Treated by Carbolic Acid.***

M. Chauffard recently made the following communication to the *Société médicale des hôpitaux*:

"The treatment of which I have to speak consists in the use of the crystallized carbolic acid in large doses, a therapeutic means which has shown to me its efficacy in the secondary fever of severe confluent small-pox, that secondary period to which, as we know, the greatest number of those suffering from that disease succumb.

"To judge more manifestly of the efficacy of this remedy, I have applied it exclusively to five cases of decided severity, and to my very great surprise I have seen the violent febrile phenomena and the accidents of suppuration abate rapidly in all these cases which seemed absolutely beyond the resources of art. A single one of these five patients succumbed, but only after he had regained appetite and been out of bed for a fortnight; he died suddenly, and the carefully performed autopsy did not reveal any thing but a certain degree of pulmonary congestion, an affection of which the patient had shown signs, however, previously.

"The idea of this medication had been suggested to me by the essay of M. Sanson on the happy effects of the use of carbolic acid in large doses in the treatment of mountain sickness (*mal de montagne*). The dose I employed was 1 gramme of cryst. carbolic acid in a draught of 125 to 150 grammes, and I have continued it for eight or ten days without any toxic accident, without any indication of gastric or intestinal intolerance, without any complaints even in regard to the taste of the draught. The medication is completed by external lotions with carbolized water of 1 or 2 per cent. The dose of carbolic acid employed internally should be lowered in the case of women and children according to the usual rules of posology.—*Abeille Médicale*, Paris, May 15.

***The Widow of a Physician*** has forwarded to this office a full set of the *Lancet and Observer*, part of his medical library, from 1859 to 1870, unbound numbers. She desires to sell them. Persons wishing to make up their sets may do so at a discount and benefit the widow.

***On Artificial Fecundation.*** This plan suggested by Dr. Girault may answer for special cases, but will scarcely be adopted as a general substitute for the old way:

"Dr. Girault, of Paris, lately read an essay before the Medical

Society of the Pantheon, entitled 'A Study on Artificial Generation in the Human Race,' an abstract of which we translate from the *Wiener Medical Presse*, May 1: He recalled the experiment of Spallanzani, Holler, and others, and then spoke of his own attempts, which in a number of instances had proved successful, while in others they had failed. As far back as 1839 he had been consulted by a married couple, the wife 25 and the husband 27 years of age, who, although in apparent good health, had been united five years and were still childless. Dr. Girault used a glass syringe, and injected some of the spermatic fluid of the husband into the uterus. After repeating this on three separate occasions, she became pregnant, and was delivered of a healthy boy. The child died of croup when four years old, which his mother regarded as a punishment upon her for the method in which he was conceived, and refused to submit to another artificial conception.

"In 1840, a musician called on Dr. Girault, on account of childlessness, resulting from a hypospadias. His wife was 24 years of age and healthy. Dr. G. threw some of the spermatic secretion into the uterus on the 27th of August, and on the 30th of the following March she was delivered of a healthy girl.

"A man, sixty-five years old, married to a wife of twenty-seven years, had passed seven years without offspring. The pair applied to Dr. Girault, who, after four failures, succeeded so completely on the fifth attempt, that in nine months afterward the lady was delivered of a pair of twins, one boy and one girl. The latter died after three months, but the former survived and was healthy when last heard of, at the age of nine years.

"Dr. Girault reports in all twenty-seven attempts at artificial procreation in the human female, of which ten were successful, and others doubtless would have been, if the couples had been more persevering in their efforts, and allowed him to continue his endeavors.

"The only instrument necessary is a uterine catheter, with a funnel-shaped opening at the external end. Into this the sperm is placed, after the point has been introduced into the cervical canal, and blown into the cavity of the uterus. Proper care must be taken that the instruments is of the temperature of the body, and it is important to convince oneself that the semen contains active spermatozoa, with long and rapidly vibrating tails, as the latter is the sign of their fecundating power."

***American Medical Journalism.*** From the excellent address of Dr. W. S. Davis to the American Association of Medical Editors, we print the following interesting extracts:

"It is thus seen, that notwithstanding the numerous abortive attempts at medical journalism which has characterized our past history, we still have an abundant medical periodical literature, the publication of which is well distributed to the various parts of our country. In regard to the present character of our medical periodicals, I am constrained to speak with some hesitancy. Twenty-two years of active editorial labor in connection with the medical press, has certainly afforded me opportunity to become familiar with the subject.

"I can not agree with those who, after excepting one or two favorite publications, unsparingly denounce all the rest as mere trash or stupid copyists from one another. Neither can I join with those, at home or abroad, who indulge in unrestricted depreciative comparison of our periodicals with those of other countries.

"And yet there are faults too obvious to be overlooked, and which this association should make earnest efforts to correct. Nearly all our periodicals are modelled on the same plan. Each contains a department for original articles, and clinical and society reports; another for selections from other periodicals; another for notices of new publications, and another for editorial and miscellaneous matter.

"It is true that most of our periodicals admit into the first of these departments articles defective in style, and impoverished in ideas; cases so imperfectly reported as to be of no value; and reports from hospitals and societies, equally imperfect and valueless, except to fill space, and give publicity to the names of the parties concerned."

"The occasional copying of an essay or article of more than ordinary value, from one journal to another, always giving due credit for its source, and thereby giving it a wider circulation, is doubtless not only justifiable, but beneficial to the author and the whole profession. But as a general rule, the editors of medical journals should treat the original matter in their cotemporaries in the same manner as new publications. They should make such careful and well-considered reviews of the important papers as would give their readers a correct idea of their nature and value, thereby enabling them to judge whether the original was worth their purchase or not.



"But in our estimation, no part of our medical periodicals is more deficient than that which is expected to be filled by editorial matter proper. Only a very few out of the whole number occupy what editorial space they have with candid articles, calculated to enlighten their readers on the many important questions connected with the sanitary, social, ethical, and educational interests of the profession. And I think it may be said with truth, that in none of our periodicals do these topics receive the editorial attention that their importance demands.

"I will hasten to a brief consideration of the question, how can medical journalism in our country be improved? To answer this question satisfactorily, involves a correct appreciation of the causes of its past and present instability and imperfection. These have been very generally attributed to the excessive number published, and the consequent inadequate pecuniary return for the labor required. And the remark is often made, that if our medical periodicals were restricted in number to such as are issued from a few of the great centers of population, where their editors have access to the abundant materials afforded by hospitals and medical societies, they would command a sufficient number of readers and supporters to give them permanence and excellence. It is very doubtful whether this view can be verified, either by observed facts, or the application of well established mental laws.

"The publication of these periodicals, in the different and distinct sections of our country, is of great advantage in developing a knowledge of the climate, topography and diseases of their respective regions, as well as stimulating a taste for reading and writing in the local profession around them. Our experience and observations have satisfied us that most of the faults connected with American medical journalism are traceable to two sources, namely, the defective education of the profession, and the imperfect arrangements of those who undertake the editorial supervision and publication of the respective journals.

"It is perfectly well known that a large part of those who enter upon the practice of medicine, under our system of medical education, are wholly destitute of that general education and mental discipline which is essential to the formation of a taste for reading and writing. Without an adequate knowledge of the elementary branches of common education, and without the slightest acquaintance with any of the sciences, they have performed the task of

reading the text-books in medicine, much as the apprentice performs his task in a mechanic's shop.

"And if here and there one of this class is induced to patronize a journal, or furnish a contribution, the letter is written in such style that the editor must either throw it into his basket of waste paper, so far rewrite it that the author would not recognize it as his, or let it appear in such condition as to disgrace the pages of his journal. It is directly to this imperfect education of the profession that medical journalism owes both its limited patronage and the literary imperfections which have so frequently subjected it to disparaging criticism. The physician whose mind has been early disciplined by study, and fed with the bread of science, will be just as much lost without one or more medical periodicals, as is the clergyman without his church paper, or the politician without his party organ.

"The second efficient cause of instability in medical journals was stated to be the imperfect arrangements of those who undertake their editorial supervision and publication. If the foregoing views are correct in regard to the causes of the insufficient patronage, instability and imperfections of medical periodicals in this country, the remedies are obvious. Nothing short of a higher standard of education, both preliminary and medical, on the part of those who enter the profession, and a more correct appreciation of the arrangements and qualifications required for maintaining a creditable medical journal, will remedy the evils. The first would multiply the number of readers and insure the proper merit in their contributions, while the second would speedily arrest the tendency to make inconsiderate efforts to establish new journals.

"You who control the medical press hold in your hands the main avenues through which the great mass of the professional mind can be reached and influenced. You have the means and the power, if you choose to use them, to mold the public sentiment of the profession and concentrate it on the accomplishment of any desirable object, with an irresistible force.

"Dr. Theophilus Parvin, at whose suggestion this association was formed last year, stated as one of the reasons for such action, that the editors of the medical periodical press were not exerting that positive influence on the medical public which belonged to their position, simply because a large part of them maintained a studied silence on all the important topics to which we have alluded, while others break their silence only by an occasional

facetious remark. Is it not time, gentlemen, that this apathy, this studied silence, on topics of so much importance, was abandoned? Is its continuance compatible with a just appreciation of the importance of our position and of our individual responsibility? If we have assumed positions that give us the power to wield an important influence for good, are we not justly responsible for the enlightened and efficient exercise of that power? These are questions that must be answered to our own consciences.

"Let us take concerted action, by outspoken, candid, full discussion of the vital questions involved in the elevation of the standard of medical education, until the great evils universally acknowledged to exist are removed, and the profession in our country rests on an educational basis commensurate with the extent of its science and the nobleness of its art. But in all our work let us remember that personalities are not arguments; that to pull down a rival is not equivalent to building oneself up; and that it takes far less time to inflict a wound than to heal it. Finally, my brethren of the editorial fraternity, let us justly appreciate both the influence and the responsibility which attach to the position we occupy, and with honest, earnest purpose wield the one and respond to the other, in such a manner as will advance the true interests of our profession, because in so doing we shall most efficiently promote the interests of humanity."

*Dangers from Insane Persons being at Large.* The senseless abuse of physicians by magazine and newspaper writers for their management of institutions for the insane, and their agency in placing insane persons in such institutions, is bringing forth its legitimate fruit. Physicians are loth to have any thing to do with insanity; and the friends of the insane fear the abuse and notoriety to which they may subject themselves if they take steps to place their afflicted ones under the most favorable circumstances for recovery from their malady, or seek to protect them or the community from possible acts of violence to themselves or others.

Scarcely a day passes that does not bring to our notice cases where death has been the result of this neglect. Several are to be found in the few papers that come under our notice at the date of this writing.

In Ohio a man has just been acquitted of murder on the ground of insanity. He killed a Roman Catholic priest. *Query*—Was he turned loose to murder another priest, or committed to a hospital



for treatment? If the latter, how long before a *habeas corpus* or the abuse of newspapers will "liberate" him?

In Indiana a woman had been insane for two years, and had attempted suicide. She had "lucid intervals." It was hardly thought that she would attempt the life of any of her family, yet in the momentary absence of her husband—who seemed to live in fear of her doing some dreadful thing, and who kept a close watch over her—she, while dressing her babe, nine months old, suddenly opened the stove door and deliberately placed the poor infant on the burning coals! The father instantly rushed in and took it out, but it only survived three hours. Will no "lettre de cachet" place her where she ought long ago to have been? But no; she has "lucid intervals," and what physician will dare "restrain her of her liberty?" It is a question for a jury of *civilians* to decide, while medical witnesses are insulted and abused by the court and the bar!

One more case and we have done with this sad record of a day—all taken from one paper! In Richmond, Virginia, lived an old woman, alone with an insane or idiotic brother. She appears to have been taken ill, and he had not sense enough to do any thing for her, or to notify any one of her illness. In this condition she suffered and died; without any one to do aught for her. When discovered she had been dead, it was supposed, for three weeks, and the cows and chickens on the premises were found starved to death. The poor idiotic brother, who ought to have been in a hospital, said that his sister had been asleep for a long time, and that she was sick before she went to sleep! He had kept himself alive apparently on some coffee grains and water. For sixteen years they had lived alone. Had he been in a hospital she would undoubtedly have been differently circumstanced, and not died in this sad way.—*Boston Medical and Surgical Reporter*.

***Pleasant Item for Smokers.*** A correspondent in New York writes us of a young man who has been for three years the victim of constitutional syphilis of aggravated character. His lips and tongue are covered with mucous patches; a most offensive odor emanates from his whole body, especially from his breath, and a caries seems about attacking the bones of the nose, etc.

He is a cigar-maker by trade, and he has daily been making cigars since he was first attacked. No cigar is made without moistening the leaf with saliva, as every one knows who has ever

seen a cigar made. Is it not more than probable that many who have smoked cigars of his make, and others similarly situated, have imbibed syphilitic poison, and then wondered how they got the disease?—*Boston Medical and Surgical Reporter*.

**Prostitution in Paris.** The Paris correspondent of the *Medical Times and Gazette* says: The Paris surgeons, who have much to do with the treatment of venereal diseases, seem pretty well decided to look upon prostitution (interpreted *vendre l'amour*) as a necessary evil, against which we can not interfere as long as the woman who prostitutes herself is not diseased. Many hold that a woman has the privilege to sell her charms to whom she pleases, and that the medical police only exists for the purpose of seeing that disease is not communicated to the purchaser. For this purpose, for the protection of the public health, men are appointed whose duty it is to seize upon clandestine prostitutes, to carry them to the nearest station for medical examination, so that, if found infected, they may be sent to St. Lazare for treatment. To show that prostitution in Paris is a commerce, like any other, over which the government must watch, the mushroom trade was cited as a comparison. Here, too, agents are appointed for the purpose of seizing upon the venomous species; but in spite of this precaution, bad qualities are sold every now and then.

The officers *de mœurs* are but thirty in number for all Paris—a number altogether insufficient, I think. The average number of women sent to St. Lazare daily—thanks to the vigilance of these agents—is something like forty, showing that the officers are either very thorough in their duty, or else diseased women are very plentiful. There are two distinct sections at the St. Lazare Hospital; the carded women (*filles à carte*) are kept apart from the clandestine. M. Clerc is of opinion that the present system is a good one, and works as well as possible without too much interfering with personal liberty. Prostitution can not be lessened by the authorities; it can only keep an eye over it, and see that it is carried on without infection. Nothing is so easy as to have a woman arrested for having communicated disease; and in the French army the soldier is forced to give the residence of the woman, or he is punished, and, if he gives a wrong address, he is equally punished. The master of a house who suspects his *bonne* of prostitution need but give her name to the Bureau de Mœurs, and she is immediately looked after. It seems really

difficult to imagine what else could be done without adopting the measure proposed by M. Le Fort, but which to many persons seems rather severe.

**Medical Department of the University of Wooster.** The President and Trustees of Charity Hospital Medical College, for the purpose of furthering the interests of medical education, and elevating the status of the medical profession in Ohio and throughout the West, have transferred to the University of Wooster all property, museum, records and rights in action of said Charity Hospital Medical College; in consideration of which the Trustees of said University have established, in the city of Cleveland, a medical college, which shall be known as the Medical Department of the University of Wooster.

**A New Theory of Sleep.** Dr. E. Sommer has contributed to the *Zeitschrift für Rationelle Medicin*, for 1869, a paper in which he promulgates the doctrine that sleep is nothing else than the result of a *deoxygenation* of the organism. According to his theory, the blood and the tissues possess the property of storing up the oxygen inhaled, and then supplying it in proportion to the requirements of the economy. When this store of oxygen is exhausted, or even becomes too small, it no longer suffices to sustain the vital activity of the organs, the brain, nervous system, muscles, etc., and the body falls into that particular state which we call sleep. During the continuance of this deep repose, fresh quantities of oxygen are being stored up in the blood, to act as a supply to the awakened vital powers. Rest produces, though in a less degree, the same effect as sleep in reducing the expenditure of oxygen.

**Death of Dr. Copland.** We have just announced the of the death of a distinguished surgeon of Scotland, James Syme, and of Sir James Clark, of London, Physician Extraordinary (we believe his title was) to the Queen; and now we are informed by telegraph of the death of another distinguished man, well known in medical literature, Dr. James Copland. It is but a few weeks, too, since the death of Sir James Y. Simpson, of Edinburgh, was announced. Certainly the mortality of eminent medical men in England within a few weeks has been extraordinary.

**Cincinnati Hospital.** We accidentally omitted to mention, at the time, the appointment of Thomas H. Kearney (in May last) as one of the surgeons of this hospital. It is a merited compliment to a worthy and rapidly rising surgeon of this city.



## Selections.

***The Antiseptic System in Surgery.*** At a recent meeting of the Medical Society of Berlin, the leading surgeons of that city recorded their experience of the carbolic acid treatment of injuries and wounds. Prof. Bardeleben stated that, in two hundred and forty-two cases then in hospital, the success of this treatment was fully confirmed. Fifty of these were serious cases, and three of them compound fractures, which, but for Lister's method, must have been amputated. He had found very good results and less irritation from the use of sulpho-carbolate of zinc, as employed by Mr. Wood, of King's College Hospital. Prof. Langenbeck stated that, although at first he had the greatest distrust of Lister's method, yet two years' experience of it had now so convinced him of its utility, that hardly any operation was now performed in his clinic without the use of carbolic acid. He also had recently two compound fractures of the leg, which, according to still prevailing doctrines, should have been amputated, but had both run a favorable course under the carbolic acid treatment. Prof. Lister, commenting on this discussion in the current number of the *Edinburgh Medical Journal*, observes that the "poisonous action" with which M. Bardeleben has met in one of ten cases, has not occurred at all in his own practice since lac-plaster was substituted for the paste. The local irritation complained of he ascribes to the omission of the use of a "protective" to guard the wound from the direct action of the acid.—*Brit. Med. Jour.*

***Arsenic Eating in Styria.*** The question of the notorious immunity enjoyed by the Styrian arsenic-eaters against the otherwise so fatal effects of that poison, has lately been investigated by Dr. Weber, of Freiburg. He first applied himself to find out why the primary symptom of gastritis, which is the first observed when any quantity of arsenic is taken, should be absent in them. Now he finds that the Styrians always take the white arsenic in substance, either alone or with bread or bacon, once or twice a week,

and only at the new and full moon. They generally begin with one-eighth or one-fourth part of a grain, and go on with this dose until they find it no longer sufficient to produce bracing effects. They then gradually increase it, and it is only years after having first commenced the use of the arsenic that they are able to take quantities varying from three to six grains, which to persons unaccustomed to the mineral would be a fatal dose. That no gastritis follows, Professor Weber ascribes to the small initial dose, and the exceedingly gradual increase which takes place. The initial dose causes no inflammation, but only irritation, which, if frequently repeated, leads to thickening of the mucons membrane, and more especially of its epithelial layer, whereby the membrane is effectually protected from a too profound action of the poison. It is, therefore, not surprising that at last doses are easily borne which would produce gastritis in other persons, just as habitual drunkards may, with a certain amount of impunity, take pure alcohol, which would cauterize the stomach of others.—*Medical Mirror*.

**Retracted Nipple.** Dr. Geo. H. Lyman, Boston, Mass. (*Boston Med. and Surg. Jour.*), at a late meeting of the Boston Obstetrical Society, described the manner in which the child's tongue "strips" the nipple between its tongue and upper jaw, as a milker strips the cow's udder with his fingers. He had observed the operation in the mouth of an infant with hare-lip.

He had also related the case of a woman whose nipple was so poorly developed as to be apparently on a level with the breast. After confinement the breast could not be evacuated; the consequence of which was an excessively troublesome abscess. In her next pregnancy the plan was adopted of breaking off the neck of an ordinary wine-bottle (with smooth lips), and binding it on to the breast in such a manner that the circular rim of glass pressed upon the areola around the base of the nipple. This was done for ten days preceding confinement, and the result was most satisfactory. Not only was a deep circular depression made around the nipple, but the latter became more elevated; and the success of the experiment was established by the ease with which the child, when born, accomplished the act of sucking.

**Death of Lady Simpson.** The widow of the late Sir James Y. Simpson died at Killin, Perthshire, Scotland, June 17th.

**Intra-Uterine Medication.**—Dr. J. C. Knott read a paper upon this subject, from notes which we give a full abstract:

After a brief *résumé* of the leading points of an article which he has published in the *Journal of Obstetrics* (November, 1869), upon the various indications for intra-uterine treatment, the various means devised to meet them, and especially a new and safe instrument for uterine injection, the speaker said that his attention had been of late particularly drawn to the chemical effect, upon the bloody and other uterine discharges, of most of the agents commonly introduced into the uterus in the topical treatment of its diseases. The albumen, fibrin, and corpuscles of the blood constituting, according to Flint, Jr., about four-fifths of its bulk (according to those who reject their water of constitution, about one-fifth), are coagulated, by some of the agents so used, into a solid mass. Most of these, indeed, have a greater or less coagulating effect, not only upon the blood, but as well upon mucus and the various leucorrhœal discharges which are highly albuminous. The important points are, that some kind of chemical reaction takes place between these agents and the fluids found in the uterus and vagina, and that this must greatly modify the effect of their application. A portion of the whole of the substance introduced will be neutralized and rendered inert by the discharges which it meets. Even chromic acid, for example, may be injected into a uterus filled with blood, and pour out of it without irritating the vagina, which is extremely sensitive to its action. Stillé mentions cases where pieces of lunar caustic have been swallowed without serious injury. Corrosive sublimate has such an affinity for albumen, that the white of egg is its best antidote. Tyler Smith says that leucorrhœal discharges, coagulated by injections, may remain in the vagina for days, and then come away in an egg-shaped mass. If this can take place in the vagina with its large opening, it is far more likely to occur in the body of the uterus, with its narrow outlet. That such coagulated masses were sometimes retained in the uterine cavity for an indefinite time, producing great irritation and protracted discharges, the speaker had had abundant occasion to observe.

If, then, inert chemical compounds are formed between the materials introduced, by injection or otherwise, into the uterus and the fluids found there, the extent to which the uterine mucous membrane is affected by the operation will depend upon the proportion between the two. And this will explain the discrepancies



among gynæcologists regarding the value of various intra-uterine remedies. In this city the favorite method of application is by means of the probe, wrapped with cotton and dipped into a solution of the medicament. Dr. Sims uses a curved glass rod, without the cotton, and to this not more than two or three drops can adhere. The result of this treatment must be, in most cases, either negative or harmful. The greater part of the substance upon the probe will be rubbed off in passing the cervical canal. What remain will very likely be thrown into a puddle of albuminous fluid; or if the uterus be flexed, as is so often the case, it will probably come in contact with only one side of the organ, where the mucous membrane may be perfectly sound and so be only damaged by the application; or it may meet with a tuft of exposed vessels, and produce the most violent uterine colic, metritis, ovaritis, etc. It is essential to the proper effect of remedies that, preparatory to their introduction, the uterus be cleared out, as far as possible, by suction with the syringe. But often the surface is coated with a tenacious discharge, to remove which we must employ a weak solution of muriatic acid, common salt, or some other solvent of albuminous matter.

Led thus to the belief that intra-urteine medication had hitherto been most unsatisfactory, the speaker had made a series of experiments, which he hoped others might follow up, so as to place this practice upon a more firmly-established basis.

Styptics arrest hæmorage either by coagulating the blood or by constricting the vessels. To secure their action, it is necessary to keep them for some little time against the bleeding part; this an injection into the bleeding uterus often fails to do, though it may form a coagulum that will act as a tampon, and so stop the flow. The most effective way to control uterine hæmorrhage is to inject iodine, and then plug the cervix with cotton and persulphate of iron.

To determine the coagulating effect upon albumen of different reagents, the doctor had added to white of egg, in test tubes, a few drops each of undiluted solution of persulphate of iron, saturated solution of chromic acid, same of tannin, same of nitrate of silver, pure carbolic acid, and Churchill's tincture of iodine. These experiments were repeated before the Society, and the test tubes handed round. The iodine produced only a flocculent precipitate, but each of the other reagents combined at once with about its own bulk of albumen, in a firm, globular coagulum, which could

neither be diffused throughout the mass, nor increased in size by shaking.

Next, to imitate the most watery of the uterine leucorrhœal discharges, the white of egg was diluted with four parts of water, and submitted to the reagents as before.

Persulphate of iron (Squibb's solution) coagulated the whole mass into a jelly.

Saturated solution of chromic acid instantly formed a coagulum, less solid than before, but still too consistent to pass through a canula. Chromic acid the doctor considered a much more powerful intra uterine remedy than persulphate of iron, and far more dangerous. If not neutralized by the secretions, it might produce the most terrible results. It was the most destructive to animal tissues of all agents used in medicine, and a strong solution would in twenty minutes completely dissolve a small animal. Even its most cautious introduction into the uterus, by the probe, was not free from risk.

Tannin produced a coagulum easily washed away, giving the mass only a syrupy consistence. This agent had in common with persulphate of iron, the merit of being but slightly irritant.

Nitrate of silver produced a profuse, flocculent precipitate; and sulphate of copper had the same effect. It was generally agreed that nitrate of silver is one of the harshest applications to the uterus, particularly in the fluid form. The speaker had once injected a five grain solution, and came so near killing his patient, that he had never experimented with it since. It was remarkable that it did not produce such severe results when applied to the uterine cavity in the solid form. To prove this, and to show how inefficient must be its ordinary superficial application, was read a long extract from Courty, who leaves the solid stick to dissolve in the uterus, as he claims, with much benefit and no danger.

Alum produced no coagulum, and so might probably be advantageously introduced into the uterus.

Saturated solution of carbolic acid in water produced a pulverulent precipitate. The doctor had found the injection of this solution give much pain, where that of iodine caused almost none. It was of much value, however, as an antiseptic.

The precipitate produced by iodine was not such as to interfere with the fluidity of dilute albumen. There was no really potent remedy of which the uterus was so tolerant as of this. Even Churchill's tincture, undiluted, would be well borne where the

most cautious use of nitrate of silver would give trouble. Of all intra-uterine remedies, iodine had most commanded the confidence of the profession. It was something more than a stimulant, a caustic, a styptic; it was a remedy *sui generis*, whose curative action could not be fully explained. The fact of its ready absorption made it especially valuable where we wished to affect the deeper tissues of the uterus, as in chronic inflammation. Nitrate of silver or chromic acid, on the other hand, had only a stimulant or caustic action; indeed, the absorption of the former would produce toxic effects.

In intra-uterine treatment we should begin by testing the tolerance of the organ, first with tepid water only, and then with a very weak solution of iodine. Though commonly almost destitute of sensibility, yet, under some conditions, the uterus becomes, like inflamed periosteum or peritonæum, exquisitely sensitive. But, even in these cases, it can usually be educated to bear injections of the requisite strength.

The result of a series of experiments upon blood was, in general, that most of the reagents above mentioned produced a coagulum firmer than that with pure white of egg. As before stated, the coagulum formed in the uterus by persulphate of iron, though temporarily arresting hæmorrhage as a tampon, might afterward keep up the flow by its irritant action. In a case of metrorrhagia, close at hand, the speaker had used this styptic by the advice of Dr. Sims. It had at once stopped the hæmorrhage, but for five days since a discharge had been taking place. Yet there were some cases where we must use the iron and hazard the risks.

With regard to the treatment of endometritis and its complications, gynæcologists might be divided into three schools—the cutting school, the cauterizing school, and those who use no intra-uterine treatment, but depend on vaginal injections, hygiene, and constitutional remedies. Perhaps a fourth school should be added—the eclectic, combining some elements of each of the others. Drs. Sims and Emmett were generally regarded as the representatives, *par excellence*, of the cutting school. The speaker had been much associated with them, and, though he had often heard them charged with needless use of the knife and scissors, yet he had rarely seen bad results from their operations. They were both extremely cautious in the intra-uterine use of caustics; and he did not hesitate to say, from actual observation, that caustics often do more harm than comes from cutting the cervix.



***Transfusion in a Case of Post Partum Hemorrhage Successful.*** Dr. Beatty, of Dublin, records in the *Quarterly Journal of Medical Science* of that city the following interesting case:

Patient tall, well formed, and 24 years of age. Became pregnant for the third time in September, 1869. Toward the end of following November, she had discharge of blood from the vagina, without pain, which came on every night, and lasted till morning, small in amount, and then disappeared during the day. Under rest and proper remedies the bleeding was kept in check, so that in January its recurrence was at long intervals.

The account proceeds: "On the morning of the 22d of February, I was sent for at seven o'clock, and on my arrival I found that she had been seized with labor an hour before, accompanied with profuse hemorrhage. She had no nurse; her mother was alone with her. A six month's child was expelled, alive, and lying in an ocean of blood. The patient was pale, pulseless, and cold as marble. The placenta was still in the uterus. Upon making pressure on the abdomen, a very large coagulum of blood was expelled from the vagina; the uterus felt firm; and on tracing the cord up, the os uteri was found closed to the size of a two shilling piece, holding the placenta within. A slight draining of blood continued to flow. The only stimulant at hand was a bottle of sherry, of which I gave her three glasses in rapid succession. It was very plain that she was in imminent peril, and I dispatched a messenger to summon Dr. Denham, who came to my assistance without delay." Slight bleeding, which still continued, was arrested by the removal of the placenta and the injection of vinegar and water; but the condition of profound collapse remained. Injections of beef tea and brandy were administered by the rectum, with beef tea by the mouth and hot bottles to the surface. At 2 P. M. transfusion was decided upon, but a slight flickering at the radial pulse determined a postponement of the operation for the time. "Up to 6 o'clock matters remained in the same state, but after that every bad symptom became manifest. She became insensible; the gasping and sighing were continual, and the restlessness and tossing were constant; the countenance became ghastly, and the jaw dropped. All trace of pulse had long vanished, and death seemed very near at hand. Finding matters in this state, I determined not to let her die without making the only effort that, in my mind, could save her, and I again summoned

the same gentlemen to her aid. Mr. Colles and Dr. McDonnell arrived at 9 o'clock, but Dr. Denham was not able to attend.

It was now too manifest that she had not many minutes to live, and we proceeded to perform transfusion. Her husband readily offered to furnish the blood, and about ten ounces were drawn from his arm by Dr. McDonnell. This, as it flowed into a common bowl, was agitated briskly with a glass rod, in order to separate the fibrine; and the agitation was kept up after the full quantity had been drawn, and for some minutes after, until a large coagulum of fibrine adhered to the glass rod. During all this time the bowl was kept floating in a basin of hot water. The blood was then strained through a muslin cloth, and all the fibrine was thus separated. All this was done in the parlor, and the blood thus prepared was carried up to the patient's bedroom. The difficulty of the operation now commenced. The patient was as a corpse, bloodless; there was no trace of a vein to be found in her arm. A ligature tied round above the elbow showed nothing. By feeling cautiously, what we imagined to be a vein was perceived. Dr. McDonnell, who performed this operation with that skill, coolness, and dexterity, for which he is remarkable, now adopted the expedient of pinching up a fold of skin at the bend of the arm, and then running a narrow bestoury through it, split it up, leaving a wide, gaping wound in the skin, which displayed the veins at the bottom, resembling small, flat, dead earth worms. The median basilic appeared to be the largest, and under this he passed a long acupressure needle, so as to elevate the vein, and prevent it escaping during the remaining steps of the operation. The difficulty now was to open this small, flat, empty vein, without transfixing it. This he most dextrously accomplished by means of a fine pointed pair of forceps, with which he seized the anterior coat of the vein, and then with a fine tenotomy knife, the back of which was kept in contact with the vein, he succeeded in inserting its point into the vein, and slit it up above the point at which it was crossed by the subjacent needle. The bowl of blood (which, during this necessarily tedious proceeding, had been kept floating in hot water) was now brought to the bedside. The injecting apparatus was of the simplest construction. A common brass enema syringe that holds about two ounces, such as is used for self-administration, was fitted with a fine india rubber tube coming off from the side. This was about a foot long, and terminated in a fine glass tube four inches long, running to a fine point at its

extremity. I held the bowl containing the blood with my left hand, and with the right I held the brass syringe standing upright in the blood, and keeping the lower end of it well pressed to the bottom so as to prevent the possibility of any air gaining access to the interior. Mr. Colles worked the piston slowly and cautiously. The instrument was filled with blood until it ran out at the nozzle, and Dr. McDonnell proceeded to introduce the glass tube into the vein; but this was very difficult to effect, for although a very sufficient opening had been made into the vein, it was so flat and collapsed that some time elapsed before he could accomplish his object. At length he succeeded, and Mr. Colles urged the blood forward by lowering the piston. About six or seven ounces of blood were thus poured into the system of the patient. It was intensely interesting to watch the effect produced by the introduction of this vital fluid. The first change I noticed was the improvement in respiration, the long labored, sighing, gasping effort that had been so distressing to witness became more calm and like what natural respiration should be. This began to appear when about half the quantity of blood had been injected. The countenance became less ghastly, and imminent death seemed warded off when the last portion of blood had entered her vein. The restlessness and tossing still continuing, I gave her thirty drops of Batley's solution, and repeated the dose in half an hour; a third dose had the effect of producing sound sleep, from which in six hours she awoke, warm and conscious, with a distinct, though very fast, pulse. She asked for food, and eat a good breakfast of tea and toast."

Convalescence was rapid, the report on the 26th being: "Another excellent night. Pulse 100; ate half a roast chicken for dinner, and drank a glass of sherry."

"From this time she progressed steadily, and after being out several days to drive in a carriage, she left town for the country on the 6th of April."



## Reviews and Notices.

***A Physician's Problems.***—By CHARLES ELAM, M. D.  
Boston: Fields, Osgood & Co., 1869.

Some time since this little volume was placed on our table, and we have delayed its notice, because we have again and again picked it up for perusal and found it too attractive to stop to jot down notes. Its topics are not strictly medical, they are on the confines of professional study however, and will be found to afford a decided contribution to our literature. The chapters very well suggest the tenor of the book, which we commend to our friends as interesting and profitable reading.

Natural heritage, degeneration in man, moral and criminal epidemics, body *v.* mind, illusions and hallucinations, somnambulism, revery and abstraction. Dr. Elam's style is pleasant and readable—and his reflections and accumulated facts show that he is a thinker. For sale by Robert Clarke & Co. Price, \$2.00.

***Renal Diseases:*** A clinical guide to their diagnosis and treatment, by W. R. BASHAM, M. D., Fellow of the Royal College of Physicians, etc., with illustrations. Philadelphia: Henry C. Lea, 1870.

Unusual attention is being given recently to the study of the various renal affections, and this little volume is a clever contribution to the subject, based upon the author's clinical observations and embracing the substance of his teaching. Part I. embraces a study of the various diseases and accidents of the kidneys which are of an inflammatory character, or produce inflammatory conditions. Part II. treats of the chronic diseases of the kidneys, or as Dr. Basham styles them, the non-inflammatory. Part III. considers the properties and constituents of the urine. The book is a good one, in small condensed compass, and especially adapted to the use of students.

***The Half Yearly Abstract,*** for July, 1870, is received, and as usual is abundant in an excellent resume of the recent con-

tributions to medicine and surgery. Reprinted by Henry C. Lea, at \$2.50 a year, or \$6.00 for *Am. Journal Med. Science and Abstract.*

***Obstetric Operations***, including the treatment of hemorrhage. By ROBERT BARNES, M. D., Lond. F. R. C. P., obstetric physician to, and lecturer on, midwifery and the diseases of women and children, at St. Thomas Hospital, etc., with additions by BENJ. F. DAWSON, M. D., of New York, etc. New York: D. Appleton & Co., 1870.

The American editor of this excellent book very truly says, the author has "fairly earned the right to assume the position of teacher." As would naturally be inferred from the title, it is devoted to the consideration of all those cases of difficult labor involving the use of instruments. So we have chapters devoted to the philosophy of the use of the forceps, together with the application of the different forms of forceps—the short forceps and long: their value in deformed pelvis; in short, a complete, and for the most part exhaustive treatise on the various indications for the use of this aid.

Then we have the consideration of turning, and the management of various presentations where this maneuver becomes of use, and the explanation of why, as well as when.

The indication of craniotomy, the Cesarean section, indication of premature labor, are additional topics of importance. There are finally, chapters on uterine hemorrhage, placenta previa, etc. Inasmuch as Dr. Barnes may be considered one of the most prominent English obstetricians, his views on all these matters will be read with attention.

The work is published in the usual beautiful style of Appleton & Co. Price \$4.50.

## HISTORICAL REVIEW

OF

# MEDICAL ORGANIZATIONS IN OHIO:

*Prepared for Twenty-fifth Anniversary of Ohio State Medical Society, by EDWARD B. STEVENS, M.D., of Cincinnati.*

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All excellence is the result of individual effort. But social progress, and the success of great enterprises, imply combination of labor. These two then go together—individual exertion and organized effort. The silent ant carries to its home its daily earnings—but after all *it is a poor silent ant*—though even so busy. The winter's store is the aggregate of successive accumulations of the colony.

All important social results are typed in this general proposition.

Much that we do as individuals is only selfish—but wiser and better councils and purposes, aggregate the selfish labors of the individual, and develop the features of general advancement.

Those who love the profession of medicine have steadily and steadfastly worked upon this idea. The profession of medicine in its purity—and the profession of medicine in its greatness—is the result of this sort of aggregation of personal effort, and combined or organized plan.

In the early days of all society, there are obstacles and difficulties that time, and the accumulated wealth of the community, overcomes. So, it is hard for us of these later days to estimate the worth of pioneer labor.

To-day, medicine in Ohio occupies a very proud position. There are memories of the past that we must never ignore ;



there are souvenirs of history too sacred to be forgotten. But for all this we have traveled up through tribulation and days of hardship. He who wades through the musty, smoky records and pamphlets, and scanty histories of the past *sixty years of Ohio*, will be at times *translated*—at times *sorrowful and tender*—at all times in a spirit of *veneration* for the self-abnegation of those who have gone before us—and after all, our egotism *will live after us!*

Perhaps the time will come when some “old mortality” will strive to chisel in lasting marble the brief history of medicine in Ohio during these pioneer years of our century; its traces are but the briefest landmark of *loving works well done*. The first doctors of Ohio were gathered to their fathers—brave, silent giants—but other than this they made no sign.

Our present meeting, it is true, celebrates the *Twenty-fifth Anniversary* of our present organization as a State Medical Society. Our fathers, however, were, from the beginning, well aware of the power of associated effort, to promote personal and professional culture, and advance personal and professional harmony. So we will find, in reviewing the fragments of medical organizations in Ohio, that we have had, properly speaking, *three eras of associated history*.

1st. The days of the old District Medical Law, with its many amendments.

2d. Our voluntary convention system.

3d. Our present State Society.

I. As early as about 1812 was enacted the old District Law, as it was always styled, for this State; and Dr. Drake tells us, that he made at that time a winter visit to Chillicothe, to attend the first State Convention provided for by that law.(1) There were present just five delegates: DR. CANBY, of Lebanon, Dr. PARSONS, of Columbus, Dr. DRAKE, of Cincinnati, Drs. SCOTT and EDMISTON, of Chillicothe. Of course there was no convention, but we cannot withhold our admiration of the spirit which impelled these gentlemen to

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(1) Western Medical Journal, Vol. VI., 1834, p. 479.

journey the breadth of a state in midwinter with such facilities for travel as we may suppose *sixty years ago!*

There seems, however, to have been spasmodic efforts from time to time, to keep up these conventions, delegated from the District Societies; and we can clearly trace to them influences which originated some of the most important beneficiary enterprises in Ohio.(2)

In 1827—second Monday of December—one of these Conventions was held in Columbus—(after an interval, so far as we can discover, of many years)—where we find the names of John C. Dunlevy, Joshua Martin, George McCook, Peter Allen and Thomas Carroll, amongst the active members—men who have all made a mark. Dr. Wooley, of Cincinnati, was the President, and amongst the important business transacted was the adoption of a constitution and plan of a *State Medical Society*, the first session of which was to convene January, 1829. Dr. Peter Allen, of Trumbull county, gives a graphic account of the assembling of these delegates of 1827.

“Towards the latter part of that year, some fifteen or twenty horsemen might have been seen wending their way, through mud and mire, along the different roads that centered in the village of Columbus. Their personal appearance somewhat resembled that of a company of men crawling out of a canal, where they had been excavating on a rainy day.”(3) If this calls up primitive days to our mind—it may also be remarked that doctors in those days enjoyed a good deal of primitive surroundings. For a musical account of a class of *female physicians* who practiced largely in the first settlement of our State, and wielded much more influence, we regret to say, than the female physicians of our time—I refer you to a capital paper read to the Society in 1857, by Dr. Holston.(4)

So far as we can discover this effort to form a State Society did not succeed and whatever organization was feebly sustained continued in the convention form; a convention, for

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(2) Drake's Western Medical Journal, Vol. I., 1827, pp. 62, 592.

(3) Dr. Peter Allen's Address—Transactions for 1857.

(4) J. G. F. Holston's Report on Obstetrics, 1857, page 40, *et seq.*

example, was held in 1831. These conventions, however, were sometimes styled General Medical Society for Ohio.

The older members of this Society will remember this old District Medical Law, as a plan to control the practice of medicine; no one was recognized as physician unless he was admitted to membership in a District Society—he could not collect his bills by law. But it was at length agreed that during its operation quackery and systems of irregular practice flourished as by a hot-bed process. So that finally, and after various modifications, in 1833 the Legislature entirely repealed the law; and thereafter medical conventions ceased to be the result of law, and became matter of individual and voluntary enterprise. Our past legislative experience, however, seems to stick to us, and has doubtless induced the profession to be chary of seeking for itself any form of legal protection.

II. After the repeal of this law, and the organization which grew out of it, we find no record of any State Convention until that of January, 1835, which was convened in response to a circular issued by Dr. Wm. M. Awl, of Columbus. As this Convention begins our *second era* of voluntary conventions, it will be of interest to clip from that circular the objects to which professional attention was particularly invited.

“The regulation of Professional Etiquette.

The construction of Independent Medical Societies.

The support of a Periodical Journal of Practical Medicine.

The erection and location of Public Asylums for the reception of Lunatics and the instruction of the Blind.

The promotion of the Temperance Cause.

Regulation of Vaccination.

The convenient supply of the Leech.”(5)

To this Convention, “all regular, scientific practitioners of medicine, who were disposed to advance the honor and dignity of the profession,” were invited.

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(5) Drake's Western Journal, Vol. VIII., 1835, p. 453, *et seq.*



The Convention was largely attended, and seems to have entered earnestly upon the important topics suggested by the circular.

Dr. Peter Allen, of Trumbull county, was made President.  
 Dr. Kreider, of Lancaster, Recording Secretary.  
 Dr. Wm. M. Awl, of Columbus, Corresponding Secretary.  
 Dr. M. B. Wright, then of Columbus, Treasurer.

Dr. Dan. Drake appears as one of the leading spirits. He gave an address, urging the establishment of a school for the instruction of the blind.

Dr. Thomas D. Mitchell, gave a lecture on the necessity of erecting a State Lunatic Asylum, at that time the only institution of the kind in Ohio, being the imperfect cage attached to the Commercial Hospital at Cincinnati.

Hospitals, Medical Journalism, Medical Education, all came in for consideration at this meeting.

The Convention closed their deliberations by singing a parting ode to the tune of Old Lang Syne, (6) and adjourned to meet at the same place on January 7, 1838. I quote the words of the opening stanza of that ode :

From Erie's chill and misty coast,  
 Ohio's sunnier shore,  
 We came to blend our various thoughts,  
 Then part to meet no more.  
 Ah ! we must part my stranger friends,  
 This kindly greeting o'er,  
 But let our hearts together cling,  
 Deep pledged forever more.\*

As agreed, the Convention of 1838 was held, and manifested a large degree of professional energy.

Dr. S. P. Hildreth, of Washington county, was President.  
 Dr. Wm. M. Awl, of Columbus, Recording Secretary.

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\*NOTE.—I learn from Dr. Thompson that the author of this ode was Dr. Drake, who had a number of printed slips for the use of the Society, and, indeed, in various ways made special individual effort to secure interest to this meeting.

(6) Drake's Western Journal, Vol. VIII. p. 485.

Important reports were made at this meeting, on educational and scientific matters, and a very readable letter was furnished from Prof. Willard Parker, then of Cincinnati College, (Drake's), reviewing with some critical sharpness the state of "French Surgery." Prof. Parker had just returned from a visit to Paris.

The Convention of 1839 was held in the city of Cleveland, and the time was changed from January to May, a period of the year to which it has very nearly adhered ever since. And from this time we find the meetings were more frequent; with the exception of 1840, Conventions being held annually until the Convention merged into our present State Society.

At Cleveland—

Dr. J. P. Kirtland, was President.

Dr. Geo. Mendenhall, (then of Cleveland, now of Cincinnati), Sec'y.

In 1841—Convention at Columbus—

Dr. George W. Boerstler, of Lancaster, President.

Dr. M. Z. Kreider, ———, Secretary.

This Convention adjourned to meet in Cincinnati in 1842, and Prof. John T. Shotwell was requested to have a cadaver prepared with the view of demonstration to the Convention of the Surgical Anatomy of Hernia, though we do not find this request carried out.

May, 1842—At Cincinnati—

Dr. Robert Thompson, of Columbus, President.

Dr. L. M. Lawson, of Cincinnati, Secretary.

1843, May 8—At Lancaster—

John P. Harrison, of Cincinnati, President.

Tom O. Edwards, of Lancaster, Secretary.

May 28, 1844—At Mt. Vernon—

R. D. Mussey, of Cincinnati, President.

L. M. Lawson, of Cincinnati, Secretary.

From 1845 to 1851, Conventions were held in Columbus each year; of 1845, 1846, and 1847, I find no records.

1848—R. Hills, of Delaware, was President.

J. H. Tate, of Cincinnati, Secretary.

1849—Phiny M. Crume, of Eaton, President.

N. Gay, of Columbus, Secretary.

1850—W. W. Rickey, of Toledo, President.

John A. Murphy, of Cincinnati, Secretary.

1851—Wm. Judkins, of Cincinnati, President.

S. B. Davis, of Franklin county, Secretary,

Thus, incidentally, we have called up some of the men who were the active workers of those Convention days. Very many of these also continued to lead the Society; but the giants of those days are not with us now.

Samuel Parsons, Robert Thompson, Joshua Martin, Edwin Smith, Dan. Drake, Thomas D. Mitchell, John Eberle, Silas Reed, Wm. Mount, Daniel S. Gans, R. L. Howard, Amasa Trowbridge, John P. Harrison, Reuben D. Mussey, John T. Shotwell, John Dawson, C. C. Sams. What a host of worthy men were there, who have filled up their measure of good works, and gone to reward.

Several active Convention men, subsequently left Ohio for new fields of labor, in various directions. Drs. Isaac and Elias Fisher, were energetic and cultivated men, hard working practitioners of Southern Ohio; they are westward. Dr. S. P. Hunt, of Warren county, was a faithful worker of that time, he has retired from practice and lives in Illinois, in the enjoyment of a vigorous old age. Prof. Willard Parker, long since removed to New York City, where he still stands foremost in Surgical ranks.

Prof. Thomas D. Mitchell, removed to Philadelphia, and died in the harness, a Professor in Jefferson College. Samuel D. Gross was comparatively unknown to fame in those days. I need only allude to his present proud position as a proof of the wonderful intuition of Drake in his foresight of the future of men. Dr. Wm. M. Charters, then of Lebanon, Warren county, is now Prof. of Chemistry in Savannah, (Ga.) Medical College.

Boerstler, Kirtland, Rives,\* Carroll, Rogers, of Springfield,

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\*While the ink is scarcely dry on these pages, we receive the intelligence of the death of one of these prominent names. Full of excellent worth



Rogers of New Richmond, Russell, Henderson, Awl, Conklin, are still with us, some of them, thank God, full of vigor, most of them full of honors as of years, and ripe grain for the Master's sickle.

As we have seen, these voluntary Conventions continued to be held until 1851, but the State Society was organized in 1846, and for these years, 1846-51, Conventions were held simultaneously with the society, and at the same place. It is not exactly easy to understand why the two organizations were thus continued, especially as the active men of both were the same.

III. The *Ohio State Medical Society* was organized in a parlor of the old Neil House, Thursday evening, May 14, 1846.

Dr. Boerstler was chairman of the preliminary meeting and First President of the State Society. Dr. James F. Hibberd was Secretary, and appears to have been one of the most active in the organization of the Society. Dr. Hibberd, long ago removed to Richmond, Indiana, and is recognized as one of the leading physicians of that State, and well known as a prominent member of the American Medical Association.

The records of the Society for the meetings of 1846, 1847, 1848, are but meagre. There were 25 gentlemen enrolled as members of the original organization. Amongst them we note the names of the lamented Jesse P. Judkins and the lamented John Butterfield, Vice Presidents of this first meeting; also, we find Samuel St. John, who, I presume is the present brilliant Professor of Chemistry in New York City. Still on, amongst the list of that first roll, are the names of

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and honored labors, Dr. Landon C. Rives is called by the Master to go up higher. In his day he was one of that brilliant faculty of the old Cincinnati College grouped around Drake; amongst these great men he stood a peer. He has just departed loved by all who knew him, full of honors as of years, having reached the full extent of the prescribed four score.

our honored President, Prof. S. M. Smith, and the faithful watch-dog of our Society's treasure—Dr. J. B. Thompson.

For 1847—Robert Thompson was President.

F. Carter, Secretary.

For 1848—Jared P. Kirtland, President.

F. Carter and R. Hills, Secretaries.

For 1849—R. D. Mussey, President.

Hills and Carter, Secretaries.

For 1850—R. L. Howard, President.

Hills and Carter, Secretaries.

About the year 1848-49, an effort was made to legislate all sorts of irregular practice into the Commercial Hospital of Cincinnati, and so we find, in 1849, a series of resolutions deprecating such irregularity—thus it will be seen the tactics of quackery—like history—is still but repeating itself.

In 1850, Ohio seems first to have made her record in the operation for Ovariectomy; so well sustained by our ex-President, Dr. Dunlap, at the present time. That year, Dr. Philip J. Buckner, then of Georgetown, made his first report on Ovariectomy with cases; with a second report in 1851, more minute on the general subject of Ovarian Disease, and tabulating 11 cases of operations, then believed to be all that had been made in Ohio up to that date.

1851. The meeting for 1851 was held in Columbus, (such being the requirement of the By-laws up to this time—a provision, however, repealed at this meeting, and the Society met in Cleveland in 1852.)

For 1851—Dr. G. W. Boerstler, of Lancaster, was President.

[Drs. Trevitt and Effinger, Secretaries.

We now find the question of segregating teaching and granting of degrees suggested in a report of Dr. Trevitt, proposing a Board of Officers, whose duty should be to examine all candidates for medical degrees.

Dr. Buckner also offered resolutions, providing for a Board of Examiners of the preliminary requirements of students, and requiring that no member of the State Society should receive a medical student in his office until such student had received the certificate of satisfactory examination by this

Board. These resolutions were referred to Dr. Buckner for further report, and in 1852 he elaborated his plan, and presented a list of Examiners, distributed to nearly every county in the State.

So far as we are able to learn, this excellent proposition was never accepted in good faith by the profession of Ohio.

This year the old Convention system, by formal vote, merged into the State Society, Dr. Wm. Judkins, of Cincinnati, being the last Convention President. The surplus in the Treasury (\$38) was voted to the State Society—and the proceedings of the Convention printed with the proceedings of the Society.

1852—Society met in Cleveland—

Prof. H. A. Ackley, made President.

Drs. R. G. McLean and H. G. Carey, Secretaries.

Amongst the interesting papers read this year, was one by Dr. Tom. O. Edwards, claiming strychnine as an important remedy in the treatment of Cholera—giving his Hospital experience during the epidemic of 1851.

1853—Met in Dayton—

Julius S. Taylor, elected President.

Henry K. Steele and C. S. Kaufman, Secretaries.

Amongst the notable features of this meeting was the donation of a valuable gold medal, from the Montgomery Co. Society, to be offered for the best essay of 1854. This medal was awarded at the meeting of the next year, at Cincinnati, to Prof. M. B. Wright, for his somewhat famous essay on Cephalic Version, and kindred topics.

This year, also, Dr. S. G. Armor, then of Cleveland—since of Cincinnati—now of Detroit—united with the Society and read an essay on Zymosis; it attracted much complimentary attention and comment, and was awarded the prize of '53.

Dr. Thomas O. Edwards made a popular lecture on the "*Poetry of Science*."

1854—Met in Cincinnati—

Charles Woodward, of Cincinnati, President.

W. W. Dawson and J. T. Webb, Secretaries.



Dr. W. H. Mussey renewed the idea this year of separating the privileges of teaching and the granting of degrees; and a committee was appointed to digest a plan for a Central Board of Medical Examiners.

Resolutions were adopted providing for a memorial to the Legislature, to repeal laws restricting dissections: a movement that has at last become law, through the persevering efforts of our Society—and especially through the energy and labor of Dr. O. G. Seldon, of Tuscarawas County, and the co-operation of Dr. Jenner, of the Senate, and other medical men of the General Assembly.

1855—Met at Zanesville—

G. S. B. Hempstead, of Portsmouth, President.

Drs. W. W. Dawson and C. C. Hildreth, Secretaries.

Probably the most noteworthy matter of this meeting was an exciting discussion on Ethics. In 1854, the meeting at Cincinnati adopted a resolution approving the propriety of medical men securing patent rights for medical and surgical instruments. This excited the disciplinary zeal of the American Association at its next meeting, and our State Society was notified that we would not be admitted to representation until such resolution was rescinded, our position being regarded as in violation of the Code of Ethics. Without dissenting from this view, we cannot but regret that the American Association, with increased age and power, has not seen fit to exercise discipline with the general profession in more important respects.

At this meeting, however, the whole subject of Ethics came up for very full discussion. The valedictory address of President Woodward brought up the question at issue with the American Association, and Dr. M. B. Wright made an elaborate report, criticising generally the whole Code of Ethics, and closing with a resolution to the effect that the *golden rule* was all the code needed, and that this State Society does not require the existence of any Code of Ethics. Dr. Wright's resolution was negatived, and Dr. Grant's "*Patent Right*"

resolution was rescinded, as stated by Dr. Gordon, it "not being an expression of the sense of this Society."

1856. Met in Columbus. The venerable Peter Allen, of Trumbull county, who was an active member of the Convention of 1835, and its President, was again called to preside. W. W. Dawson and S. B. Davis, Secretaries.

The Society now seems very wisely to have practically adopted a degree of permanency in its Secretary, Dr. Dawson being continued for several years. This meeting adjourned by resolution of Dr. W. H. Mussey, to meet Jan. 20, 1857, though not specially indicated, the design of this adjourned meeting appears to have been with the purpose of influencing legislation in certain professional matters.

Thus, we find a memorial from Dr. Robertson, urging the Legislature to more fully regulate post-mortem examinations in certain cases, and to provide for the compensation of the physicians making them.

Dr. Barr proposed to memorialize in regard to the interest of practical anatomy.

Matters pertaining to a registration of births, deaths and marriages, was considered, such a law having been enacted by this State the previous year. These were amongst the most important topics considered; this adjourned meeting continuing its sessions during two days.

1857. Met at Sandusky, and the members welcomed to the hospitalities of the city in a hearty whole-souled address by the venerable Dr. Daniel Tilden—even then advanced to his three-score years and ten—but who has only been called from earth within the past few weeks, in the ripe fullness of four score years.

Daniel Tilden was elected President.

Drs. Dawson and Dunahoo, Secretaries.

1858—Met in Massillon—

F. T. Hurxthal, President.

Abr. Metz and H. M. McAbee, Secretaries.

1859—Met at Columbus—

L. Firestone, President.

Dawson and Metz, Secretaries.

About this time the importance of Asylums for Inebriates began to be especially considered, and at this session Dr. M. B. Wright, of Cincinnati, made a popular lecture, advocating their establishment.

The social feature of this meeting was prominent. Pleasant visits were made to the various public Institutions of the Capital; a banquet was given at the Neil House, and the Society made a trip to the White Sulphur Springs, enjoying the hospitalities of Andrew Wilson, Esq., for many years the popular host of that old watering place.

This brings the history of the Society down to a date quite within the personal knowledge of most of those who take an active part in its present proceedings.

The pleasant influences brought to bear upon the Society in its excursion to the Springs, attracted the meetings thither for a number of years, all the sessions from 1860 to 1866, inclusive being held there.

1860—H. S. Conklin, of Sidney, President.

Dawson and Gundry, Secretaries.

1861—M. B. Wright, of Cincinnati, President.

Dawson and T. B. Williams, Secretaries.

1862—J. W. Russell, of Mt. Vernon, President

E. B. Stevens, and T. B. Williams, Secretaries.

1863—W. P. Kincaid, of Neville (now of New Richmond), President.

E. B. Stevens and N. Dalton, Secretaries.

1864—G. C. E. Weber, of Cleveland, President.

E. B. Stevens and W. C. Hall, Secretaries.

1865—B. S. Brown, of Bellefontaine, President.

E. B. Stevens and W. C. Hall, Secretaries.

1866—J. W. Hamilton, of Columbus, President.

E. B. Stevens and W. C. Hall, Secretaries.

At the meeting in 1860, a gold medal was voted to be awarded for the best essay on "*The use of Anesthetics in Obstetrics.*" This medal was awarded to Dr. H. Culbertson, of Zanesville, at the meeting for 1862.

The period of these successive meetings at the White Sulphur Springs, covers the time of our rebellion and the terrible days of civil war. Many of our most active members were engaged in the medical service of the country, and yet the



annual attendance was quite well sustained, and the scientific papers full and valuable. Much of the miscellaneous business was suggested by the times, more interest than usual being realized by the profession of the State, in the status, rank and pay of the medical officers of the army. At the meeting of 1863 especially, interest was given to the proceedings, by the discussion of Dr. Hammond's famous "*Circular No. 6*," in which Calomel and Tartar Emetic were stricken from the "supply table" by the Surgeon General of the United States, and, as was claimed, great injustice done by implication to the good repute of the army surgeons. The resolutions of Dr. Murphy, adopted by that meeting, strongly denounced the Surgeon General's circular, and endorsed the high character of the Ohio Surgeons then in the service.

In 1865, Dr. Pierce, of Steubenville, read a report from the Jefferson County Medical Society, in regard to the condition of the incurably insane in that county. As the result of that report Drs. Pierce and B. S. Brown of Bellefontaine, were made a committee to memorialize the Legislature in behalf of these poor creatures. The committee was continued for three years, and with much painstaking labor collected a vast amount of statistics as to the condition and treatment of "*Incurables*" in every county in the State. Their labors undoubtedly exercised much influence upon the sentiment of the Legislature, as well as upon the profession at large.

The meetings for the next three years, closing up this quarter of a century review, are fresh in the memory of most of us, and only need a few words by way of completing the statistical record.

1867. Met at Yellow Springs. The meeting was pleasant and the people made us heartily welcome; but it was not a convenient location, and the Society exhibited a return to the ancient restless spirit.

E. B. Stevens, of Cincinnati, was elected President.

W. C. Hall and J. N. Weaver, Secretaries.

1868—Met at Delaware—

A. Dunlap, of Springfield, elected President.

W. C. Hall and J. N. Beach, Secretaries.

This meeting was rendered exceedingly pleasant to the members by the courtesies and hospitality of this charming literary village, seat of the Ohio Wesleyan University.

1869—Met at Columbus—

Samuel M. Smith, of Columbus, elected President.

W. C. Hall and E. H. Hyatt, Secretaries.

Thus, after nearly ten years of a cycle, the Society returned to its old centre, where, during its eventful history, it has so often been made welcome, and so often enjoyed the attractions and hearty good feeling of the people of the Capital.

To-day, then, on the shores of the beautiful Erie, we assemble to complete our first Twenty-Fifth Anniversary, and celebrate our *Silver Wedding*.

It will be observed that I have made no review of the acrimonious quarrels pertaining to personal and college matters—that were something of a feature of the old Convention times. But it must have been something of a rare privilege, after all, to mingle with such intellectual gladiators as Drake and Harrison and Eberle and Mitchell, who, in their prime, were sometimes in the same harness pulling lovingly together, sometimes warring to the death!

I have made no historic resume of the scientific contributions to our meetings from year to year, except such as were of peculiar significance, and indicated our efforts to advance general as well as professional interests.

But whoever will examine the series of annual volumes of our Transactions will be surprised to realize the large amount of substantial matter that has accumulated in these successive years. Reports upon each of the leading practical departments of our profession are steady, and constantly bringing before the Society the newest contributions—rare cases—advanced ideas in pathology—new remedies in our *Materia Medica* and improvements in our special branches of practice. It would be tedious and scarcely of profit or instruction to recapitulate them; but it has occurred to us, in our study of these records, that it is almost a pity that many of these re-

ports should remain buried in the odd volumes and limited circulation of our Transactions.

In many of them will be found a wonderful freshness of expression and matter, as well as literary excellence, that would warrant their being re-edited and published anew in book form.

Incidentally this review has alluded to the active workers in our Society; and yet we have not done justice to the host of quiet men whose allegiance to the profession has, year after year, been exhibited in unswerving devotion to the interest and prosperity of our State Society.

From year to year, new men have come amongst us, and more or less rapidly advanced to the front ranks. From year to year, the fathers have fallen out of their places, and many a dear friend meets no more with us forever. The poor who have lost, one by one, a friend in need; the rich, who have parted with safe advisers, will, each in their way, cherish the sacred memory of these departed heroes! For us they must be embalmed in the recesses of our hearts as good and honest men and brothers.

This closes up this third epoch of our State organizations—the first of our history as a compact, living, working association. The history is a worthy one. From days of pioneer life and its privations, we have come forward to a day rich in civilization and refinement. In all its development the Society has done its honorable share and borne its part in the heat and burthen.

Let us anticipate great things in the mighty stretch of the Future! that spreads out before us! Few of us who celebrate this day, will probably be spared to enjoy the *golden anniversary*; one by one we shall have done our part—well or ill—and wrapped in our last garment—go Home. But one by one, as we cease our labor, I trust the heartfelt aspiration will still embrace the Society in all its past, and hope for it the realization of the words of the great English lawyer, in regard to the British Constitution—“*Esto Perpetua.*” Not only may it be perpetual, but still better let us adopt the motto of Old Maryland—“*Crescite et Multiplicamini.*”



THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Original Communications.

*Art. I.--Human or Jennerian vs. Animal or Retro-Vaccination.*

By B. ROEMER, M. D., Charleston, Western Virginia.

It is claimed that this subject is one of intense interest to the physician, not only as a citizen of a commonwealth subject to its phases of health and disease, but also as the only representative of that science which has for its object the contention for victory with all morbid conditions to which the human body is liable. To contend for the *maintenance* of a proposition, which has for its conscientious aim the welfare of the human family, is the legitimate sphere of the science of medicine; but it should and can not be conceded, that in an argument for the *establishment* of that proposition, the assumption of the correctness of any of its parts could form a basis of its inductions, except as an impossible negative. To prove that  $x=a$  it is legitimate to say: if  $a$  be not  $=x$ , suppose it is  $=y$ , then  $x=y$  which would be foreign to the general

facts of the proposition, unless  $y=a$ . The great mass of pro-Jennerian writers, however, use indiscriminately such a course of argumentation, which is the more to be distrusted and regretted, as it is more humane and conducive to the welfare of mankind rather to distract a partially established source of public evil than to stubbornly adhere to old landmarks for sake of conservatism, antiquity, and habitude. Their line of argument is expressed in a syllogism of two premises, the first doubtful and the second true, which must result in a false conclusion :

$$x \left\{ \begin{array}{l} \text{may,} \\ \text{may not} \end{array} \right\} = a, \quad \text{and} \quad y \left\{ \begin{array}{l} \text{may,} \\ \text{may not} \end{array} \right\} = a, \quad \text{but}$$

we know that  $x$  is not  $=y$ , hence  $y$  can not  $=a$ . Let  $x$  be human vaccination,  $y$  represent retro-vaccination, and  $a$  signify the result aimed at by both protection against variola, and it will be clear to the reader how the omission of "may —" in  $y=a$  resolves the whole proposition in favor of  $x=a$ .

The demand for positivity from an opponent and the sufficiency of doubtful facts from the aggressor, blended with the fond adherence to old maxims and with the toxic outcry, "can any thing good come out of Nazareth," form another prolific source of imperfect ratiocination.

Thus the evil and fatality of the late variolous epidemic in California, are not only attributed to the absence of all vaccination, but also to the imperfect performance of it, and from the context of the Report it seems quite possible that medical men may be, and perhaps often are, careless in the observance of a vaccine posture, and that midwives and other kindhearted women, for or without remuneration, offer vaccinations *in propatulo*—but these possibilities are inadequate to prove variola following these and holding intact other vaccinations, and instead of establishing any theorism, whatever the correct inference from such facts is expressed, in the language of the Report, "that instances have occurred which seemingly justify an abatement of the implicit faith so long reposed in the discovery of Jenner;" an inference adverse to the tenor of the Report and contradictory of its aim and argument.

The official vote in England in regard to compulsory vaccination, establishes the historic fact, that whole districts in that country, the home and laboratory of Jenner, prefer variola to the doubtful prophylaxis of human vaccination, because of its almost uniform morbid sequelæ. These objections were numerous and

powerful enough to render the compulsory vaccination act of Parliament a failure. Perhaps the German population of Cincinnati, to which allusion is made in a late article on this subject, reason from analogy, neglecting to introduce a *doubtful* virus under *doubtful* circumstances. (The question is not the virtue of a *pure vaccine* in the hands of a *competent* attendant, and its consequent prophylactic powers, but the quality of the virus itself and its consequent spurious results.)

The degeneration of human vaccine lymph being the issue, the sequelæ of such a degenerate lymph must form the proofs. Great men, such as M. Guérin, may affirm that the causes for a degeneration of vaccine virus can be prevented, *because they are known*, but the inference is equally great and weighty, that *if known*, they must exist, and their place of existence should be pointed out by him or some one else. Or is it claimed that the human system possesses M. Guérin's mysterious but reliable selective affinity for the *purities* of a lymph,\* so that the chronology of transmission through selected subjects will insure an improved or unimpaired Jennerian lymph? Such an acuteness of attenuation refreshes the memory of the medical student to read Hahnemann's *Organon der Heilkunst*, section 280, where he says (I give the translation), "I have been compelled, for the last years, by a convincing experience (*überzeugende Erfahrung*) to reduce the number of shakes after each dilution from ten, as I have formerly prescribed, to two." Vaccine virus of such superlative purity has been in the hands of but few vaccinators: *one* has not *heard* of a case of variola or varioloid occurring to any whom he pronounced vaccinated among 200,000 (5 aughts) vaccinations; a *second* gave from his dispensary in 40,000 cases of vaccination no case of small-pox, and a *third*, who vaccinated 10,464 persons in his office, and 16,332 children of the public schools, and who saw every case of small-pox in his place of residence during fourteen years (and to judge from the number of children in the public schools that place must be a populous one) has never seen or heard of a single case of small-pox in any scholar who had received a certificate. A state-

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\* See *Med. Times & Gazette*, August 31, 1837. M. Guérin uses the following remarkable language: "The vaccine virus, also, transmitted through successive generations, may acquire peculiar and important properties, while the animal vaccination is a much more special and limited affair," etc. Truly, the former is an aristocrat of long ancestry, and the latter a parvenu.



ment of similar import applies, also, to one other locality. Surely, "*sit lux et lux fuit!*" The Small-pox Hospital Reports of Dr. S. Gregory give another version of the same story :

Admitted to hospital with normal variola, unprotected,	392,	died,	157.
" " " " vaccinated,	118,	"	25.
" " with abnorm. variola, unprotected,	4,	"	—.
" " " " vaccinated,	180,	"	6.

The greatest number ranging from 20 to 24 years of age, namely, unprotected, 115; died, 50; vaccinated, 106; died, 16.

Dr. Crosso, of Norwich, gives, in 603 cases of variola, 297 variola after variola and 91 after vaccination.

Thomson, of Edinburgh, 310 cases of variola after vaccination.

Chelsea Milit. Agt.	24	"	"	"	"
Heim, Wurtemberg,	147	"	"	"	"
Bousquet, Marseilles,	2,000	"	"	"	"
N. Chapman, Phil'a,	40	"	"	"	"
Mitchell & Bell, "	47	"	"	"	"

etc;

The citation of authorities, however, for or against the unimpaired virtue of the human vaccine virus, are unfortunately not extensive enough to carry conviction with it, and the observer of the various reports on vaccination should not only be guided by the relative numerical strength of the report itself, but especially by the universality of its expressions, and not by the tendency *omnino aut non*. While M. Guerin protests against animal vaccination, because of its exclusiveness, just as ovariotomy *was* objected to because of its securing woman too unconditionally against relapse, and while others object to spurious vaccination, because of a possible origin of its phenomena from different sources, in proof of which the successes of some vaccinators are offered, and declare the old Jennerian lymph as good now as at his time (according to M. Guerin, even better), it should suffice for all purposes of public hygiene, that the great majority of observers profess either a doubt in the protective capacity of vaccine lymph, as now obtained, or declare their belief in its admixture with other than vaccine matter and in its consequent source of morbid sequelæ.

It is admitted *a priori*, that if the conditions for pure vaccine lymph, as insisted upon by the pro-Jennerian faction, were possible of practical demonstration, nothing further could be desired; but it is at the same time reserved, that such lymph is not producible in a required quantity, nor are the vouchers for the purity above suspicion, the statistics of insulated successes to the contrary notwithstanding. The "*Findel-Anstalt*," of Vienna, is one of

those few institutions, which has uniformly given favorable results with Jennerian lymph, yet its vaccine products have decidedly failed to sustain their character elsewhere. Dr. G. Braun, now of Presburg and formerly resident director of the Findel-Anstalt, reports more than one case of variola and varioloid after a normal vaccination, and the maintenance of a relatively pure succession of vaccine virus is held by him to be conditional of restricted application. His lymph was rejected at Pesth, Hermanstadt and Debrecin; and California seems to be the only spot upon this planet, where the physician, his family and attendants are left intact by variola after vaccination, and it is hoped this may apply to all other contagion. There the charity of the profession may lead to the hovel and its miseries, but not to death from variolous infection.

According to the official report of *Dr. Heim*, of Wurtemberg, re-vaccination was attempted with 1,683 soldiers, of which number 1,077 gave a pustule. Dr. Lochmeyer makes this statement in reference to the Prussian army: Total number revaccinated equal 85,000; of this had previous vaccination as shown by good marks, 37,000; successful revaccination, 18,543; failed, 5,014; imperfect marks, 12,000; successful revaccination, 8,075; failed, 1,306.

In the army of Hanover (*Dr. Malory*) of 112 with good marks; 37 gave a successful revaccination, and *Dr. Heim's* Statistics of the Vaccine Bureau for the kingdom of Wurtemberg, show that among 1,363,298 there were revaccinated 44,009, of which number the pustule and cicatrix were perfect in 20,054; imperfect, 7,006. Whatever consolation may be found in the evasive statement, that the success of revaccination does not evidence the degeneration of human vaccine because variola follows sometime after variola with a mortality of 19 per cent. (the vaccine section of the Prov. Med. & Surg. Assoc. states that in their knowledge out of 239 cases of variola after variola 13 died, or 5.85 per cent. Thomson, of Edinburgh, gives 4.2; Chelsea Milit. Agent, 3.00; Bosquet, of Marseilles, 4.00, and Gregory, of London, 2.00 per cent. mortality from variola after variola) is left to the believer who has not seen.

It is true, that the Royal Jennerian Institute has continued with its old and primitive lymph since 1806; but it is equally true, that a change of lymph in 1837 resulted in a marked improvement at the Smallpox Hospital of London, and that the Registrar General of England declared, that up to that year only five diseases were

more fatal, 12,000 dying in 1837 in England and Wales, 9,131 in 1839, 6,368 in 1841, 2,715 in 1842, *a. s. f.* and if variola followed after smallpox as after vaccination, Ireland would this day give less favorable results. In 1866 there were admitted in the Small-pox Hospital (London) 25 per cent. more cases than in the previous epidemic (1863), and this increased ratio is justly pronounced by the governors of the hospital as "out of all proportion." In 1863 the number admitted was 1,537; in 1864, 836; in 1865, 1,249, and in 1866, 2,069. In 2,037 of this last number had not been vaccinated 425 or 20.70 per cent.; vaccinated, including 3 cases of variola after smallpox, 1,612 or 79.30 per cent., and the mortality out of these 2,037 was 271, of which had not been vaccinated 152 or 56.09 per cent., and vaccinated 119 or 43.92 per cent. Thus far has England succeeded in excluding by her legislation, small-pox from her domain.

I leave the question of transmission of specific and constitutional affections by means of vaccine, as it is now before the profession; no argument or proofs are needed to maintain at least these propositions, "that *some* lymph is impure and *has* resulted in contamination;" "that this contamination has been witnessed by official and otherwise competent medical men;" "that no limit can be given to this impure lymph, but that all parts of this globe have reported pertinent cases," and "that, consequently, to disregard this fact and to advocate the freedom from danger in the continuance of our present mode of vaccination, is to imperil the health of our fellow-creatures, at the hand of those who are pledged by their profession to guard it, and that to obviate such a source of danger should be one of the first cares of the physician to the utter disregard of personal convictions or favorite theorism."

That M. Lanoix, who introduced animal vaccination from Naples into France, should have been successful in a pecuniary sense at least, is neither owing to his "posters," nor to "his worship of the beifer." More of this hereafter. The income of a legitimate practitioner should be above censure or reproach, else what would be said of many eminent medical men in this country, whose practice realizes them fortunes every year; or of a Nelaton, who received not long ago 25,000 pounds and expenses for a minor operation? The report on Animal Vaccination, by M. Depaul (*Med. Times & Gaz.*, April 20, 1867), is modest and free from utopian assertions. Some of his propositions are as follows:



11. According to our experiments syphilis is not conveyable to the bovine species by inoculation.

12. When taken under proper conditions, this lymph succeeds as frequently as lymph derived from an infant.

16. The pustules obtained by this cow-pock are more voluminous and the phenomena of general reaction, especially at the period of suppuration, are more sensible than after human vaccination.

17. These manifestations have never taken on a serious character in any of the infants inoculated by us.

21. We have made too few trials of cow-pock for revaccination to be able to form an opinion.

See, also, M. Husson's Report as Medical Director of Public Assistance in *Med. Times & Gaz.*, August 10, 1867.

To offset these statements, Paris is said to be placarded with warnings of the smallpox, gaudy posters inform the people of certain doctors. French physicians and the people, nevertheless, are losing confidence in animal and returning to human vaccination, and M. Guerin is called the spirit who for many years, without truce, conducted his brilliant campaign, which has at last been crowned with success. This brilliant campaign consisted of concessive flank movements, of which I will quote a few only: "It is, indeed, a fact now generally admitted that vaccination has lost some of its preservative power;" there is a necessity, also, of a more careful selection of the virus to operate with; as to vaccinal syphilis, M. Guerin believes that in very rare instances it may exist," etc., and some other objections stated by him, referring to the superiority of a spontaneous over an artificial agent, fall very short from imparting any brilliancy to his assertions. (Consult *Med. Times & Gaz.*, August 31, 1867, and the essay of M. Chauveau before the French Academy of Sciences, *ibidem* January 25, 1868.)

I close my remarks, which have occupied more space than I desire, with the following extract from the *British Medical Journal*, March, 1870, to give some reason why M. Lanoix made 10,000 francs in a day, and by what authority "gaudy posters" informed the people of the smallpox and animal vaccination:

"The prevalence of smallpox in Paris has been attended by a failure in the supply of vaccine matter. The Government has, therefore, granted the Academy of Medicine 2,000 francs, in order to keep up a supply from the heifer. The Municipal Council of Paris, on the proposal of the Prefect de la Seine, has voted 10,000 francs for the organization of a system of gratuitous vaccination

and revaccination, at each of the mairies of Paris. The Prefect has given notice to each of the mayors of Paris that on and after March 2d, throughout the prevalence of the present epidemic, vaccination from the heifer will be performed at each mairie in turn from the heifer. The inhabitants of Paris are availing themselves of the opportunity, to a very great extent. On one morning of this week as many as 2,000 persons presented themselves for vaccination at one mairie alone."

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*Art. II.—Cholera Infantum.*

By J. R. BLACK, M. D., Newark, Ohio.

The student of medicine, just passed his collegiate honors, with head full of a confused sort of learning, anxiously awaits the calls of the public for his services. Usually, he thinks his medical teachers among the best, if not the very best in the world; fully informed upon the latest improvements, and hence, that he, being their recipient, will make a brilliant success of his management of disease. But it does not take long for him to discern that disease is not the unit, names led him to infer, and that many cases obstinately resist, nay, seem to be made worse by the treatment laid down by the distinguished Prof. A. or B. Or, perhaps, he is very apt to reason, for example, in a case of cholera infantum, that there is great irritability of the stomach with a too profuse secretion and excretion from the intestinal canal; indications to lessen this irritability by opium, and diminish the excessive secretion by astringents. But, alas, the pathology and treatment so clearly defined in the mind, too often do not answer the fond expectations in practice; the disease running on for an indefinite period—the results of treatment so uncertain that it is difficult to say whether this or that case got well in correspondence with, or in antagonism to the remedies employed.

Good common sense without profundity, requires in the healing art to see a near approach to uniformity in therapeutic results, else it is proper, nay, involuntary to doubt the success of our efforts to remove disease, and so in the decline of life think and

act as skeptics in medicine. Unless this uniformity in therapeutical results is attained, the practitioner should be dissatisfied with his knowledge and cease not day or night to grope his way to a better knowledge. Perhaps, in many phases of disease, this groping is a necessity, for the assemblage of conditions and manifestations that make up any disease may in near, or in widely separated localities, differ so greatly in their underlying qualities that what may be a very successful mode of practice in one place, may be very unsuccessful in another. I am the more certain of this on account of the success and confidence with which men in every way eminent, announce their success in treating certain diseases with stimulants, when under my own eye the same diseases under a like plan have grown steadily worse, every unfavorable symptom intensified, and the patient's consciousness of distress increased, or mercifully obliterated by delirium. If such differences in results, from the same medicines for the same disease, are not imaginary—which I think they are not—not only from the above consideration, but from others not proper here to bring forward, it follows that before adopting this or that line of treatment for any given disease, we should endeavor to ascertain if the circumstances and conditions in which that disease arose, are the same, or nearly so, to those with which the reader has to do. This must have reference not only to what are known as climactic conditions, but to regimen, purity of the air, and the weak or faulty organizations derived from the parents.

The milk, both human and animal, on which babes subsist, is from pernicious surroundings and faulty habits, less pure in compact cities than in rural districts. The air in the first mentioned places is also, as a rule, very impure; and the number of procreations with constitutions weakened and vitiated by excesses, extreme artfulness in living and syphilitic disorders is far greater in the city than in the country. Hence, even in places not ten miles distant from each other, the treatment appropriate for cholera infantum may be very different, and the results under the most skillful management, very dissimilar. In the large eastern and western cities cholera infantum is a very fatal disease, while from my experience in the second class cities of Ohio, it is one of the most manageable. In the last five years I can recall only a single fatal case under my supervision. Nor is the number of cases to be met with small: it being not uncommon to have eight or ten new cases each week. Any description of cholera infantum is to



the practitioner superfluous; its symptoms are everywhere so familiar, and withal, very distinctive.

In reference to its etiology, opinions do not seem to be well settled; mine may be summed in a few words, viz: great heat, bad air and diet. Weakly and faulty constitutions and the period of dentition undoubtedly incline to the disease, but neither are essentials, children possessing them will escape when the other three are absent, and children not possessing them will suffer when the three are present; the difference lying in this, that the former will yield to the causes much more readily than the other, and the disease be more likely to terminate fatally.

The influence of great heat is shown by the prevalence of the disease only when the temperature of the year is the greatest, and by the fact that as the scene of observation shifts to the higher latitudes, it diminishes and finally disappears. The influence of bad air in the production of cholera infantum is beyond question, and by bad air is not meant malaria, or an intangible something which is supposed to develop intermittent fever, but tangibly bad air from reeking animal excreta, piles of animal and vegetable *debris*, and the foul exhalations from human skin and lungs. It was an idea of former times that children were poisoned by sleeping with adults, and it would be well if the same idea prevailed to-day. In thousands of households, father, mother, and child sleep in an eight-by-ten box, called a room, without the slightest attention to ventilation; nay, rather with attention to guard against it, from the fear that the little being committed to their care may take cold. Ignorant and fatal kindness! The lungs must have their natural food, which is pure air, far more urgently than the stomach needs its natural food. A child can live a day or two without eating, but not five minutes without breathing. Pure air, it is no figure of speech to say, *is the breath of life*, and to starve the blood of this will prove more quickly disastrous to its healthy life than to starve it through the stomach. As if medical men were ignorant of these facts, they bestow the most marked attention to the sustenance of the blood through the stomach, and little or no attention to the sustenance of the blood through the lungs. It is the medical fashion of to-day to direct that patients have an abundance of concentrated nutriment, with wine, iron and quinine, and pay no heed to the needs of the poor half starved lungs. Some medical men would be indignant if a spoonful of unwholesome food were given the sick, while they carelessly

allow gallons of unwholesome air to be drawn into the lungs day and night. They even apparently forget what ventilation is; thinking it is secured by a single small outward opening in a house; whereas a constant renewal of air can only be secured by two or more. It should never be forgotten that a gorged stomach is no substitute for starved lungs, and that healthy life under such circumstances, is just as impossible as it is for plants with their roots imbedded in a rich soil, but deprived of light, and kept in stagnant air.

Children suffer more from air impurity than adults, because the changes in their blood is much more rapid and relatively greater in the one than in the other. Infants breath from five to seven thousand times oftener in twenty-four hours than adults, and this is because they need relatively more oxygen, and the more frequent rinsing out of the lungs of the poisonous matters which the cells of their lungs exhale. They also suffer more than adults from the out-door air, impurities of towns and cities; and every experienced physician is aware that in cholera infantum a change of air often acts like magic in reviving the drooping energies. So impressed am I with the importance of pure air for children that when they have it constantly in doors and out, an attack or the results of cholera infantum need not be feared. It very seldom occurs under such circumstances, and when it does, the attack is seen to be mild and tractable. Improper diet, especially that which is crude, or unduly refined or concentrated will often excite an attack. But if the constitution is not faulty, and the blood deprived by feeding the lungs with unwholesome air, the removal of the exciting cause will be followed by a speedy resumption of healthy action. I have not seen the very unfavorable result which some attribute to feeding an infant on cows milk, provided the kine are healthy, and not too much sweetening be added to the milk with crude brown sugar.

*Treatment.* To arrest vomiting no remedy equals calomel in from one-fourth to one-eighth of grain doses, mixed with a little prepared chalk, and given every two or three hours, administered, if possible, just after emesis. The drink to allay intense thirst ought to be given often, ice cold, and in small quantities. Sometimes it is better to put a sprig or two of mint in it, or when there is great intestinal irritation the bark of slippery elm. Later, when the prostration is great, I have seen very happy effects from the use of equal quantities of ale and water as a drink. The little

patient will cling to the vessel containing it, and reject the one containing pure water when they have the chance of preference. I can not speak too emphatically of the soothing, toning influence of this mixture in cases of extreme debility.

The discharges from the bowels are usually at the onset of the disease, watery, floecy or frothy, sometimes exhibiting bright green tints. The calomel in small doses will change the evacuations for the better in a day or two in nearly every case, and after vomiting is somewhat arrested, and the intestinal discharges remain copious and frequent, to combining it with two or three grains of sub. nit. bismuth answers an excellent purpose. This checks as well as thickens the evacuations.

After the stomach becomes retentive, the thirst less intense, the heat of the head lower, the eyes fully closed in sleep, and the intestinal evacuations tinged with bile, these measures may be suspended, or be carried out less frequently, and others adopted in accordance with the exigencies of the case. If the evacuations are yet too frequent, attended with considerable pain, the chalk mixture with paregoric will restrain them in a very admirable manner. If digestion is very imperfect, which it is almost certain to be, pepsin wine immediately after partaking food as recommended by Dr. Reeve, is of great benefit. If to the same conditions these are superadded, flatulence and diminished tone the aromatic syrup of rhei, guarded by a little paregoric will be found to render efficient service in progressing the cure. In the way of nourishment nothing equals milk and lime water, and for the advanced stages, mutton broth, with tapioca, or blanc mange when the tongue is not dry.

During treatment close attention should be paid to pure air, which too often unattainable in cities, may be readily secured by removing to the suburbs or the country.

I have been led to present this mode of treating cholera infantum not from its novelty, but from its simplicity and success. No doubt others may think the same of theirs, and if so, may peruse the above mode more from curiosity than for information. But there are others, especially junior members of the profession whose mode of treating this disease may not be all that they could desire. It was so once with myself, and I would then have been grateful for suggestions, which would have tended to make its management in this region and civic conditions more efficient. There are also those who treat this affection with castor oil and paregoric, a



line of treatment often very offensive to an irritable stomach, and which I have seen superseded by that above narrated to the immediate relief, and amendment of all the symptoms. Again, the opiate and astringent plan, even during the height of the febrile movement is in favor with others. I can not help regarding this mode as highly mischievous. Brain complications, visceral engorgements, an increase of fever, a greater fatality or a prolongation of the struggle with disease are the almost invariable results. I speak on this from personal observation, a mode which I was years ago led to adopt from the plausible way of reasoning upon the indications of cure in cholera infantum, namely, to subdue irritability, and diminish excretion.

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*Art. III.—A Case of Hydrometra, with Remarks.*

By H. BRADLEY, M. D., Felicity, Ohio.

On the 15th of June, 1870, I was called to see Mrs. K., aged 39, the mother of nine children, the youngest but six months old. Patient complained of general lassitude with pain in her sides and back and soreness in the abdomen, tongue but slightly coated, bowels constipated, with scanty and high colored urine. She had not menstruated since her last confinement, which occurred in December, 1869; but to this I attached no importance, as she was nursing her child. Her health was good from her confinement up to about the first of June; at this time, she commenced experiencing pain and weakness in the small of her back, which continued gradually increasing until we saw her. She had not been incapacitated, however, from attending her household duties. I prescribed remedies to act upon bowels and kidneys, and enjoined perfect quietude. I did not visit my patient again for six days, when I found the symptoms present at my first visit in a more aggravated form, especially the pain in the sides and back; but added to these was that of general anasarca; the lower extremities and bowels were considerably swollen, with tumefaction of the face. Her tongue was still but little coated; pulse somewhat accelerated. I now suspected the existence of a serious pathological condition of some portion of the abdominal viscera, but was unable to locate the difficulty or determine its nature, as there was

no derangement of the stomach and bowels except the latter were constipated; no tenderness in the region of the kidneys nor over the liver, and but comparatively little soreness of the abdomen upon pressure. Forming what I conceived to be an approximation as to the true nature of the case, I made my prescription accordingly. Two days later, June 23, I saw patient again; found her in a somewhat alarming condition; superadded to the symptoms already enumerated, was great difficulty in voiding urine, pain through the abdomen, nausea with occasional vomiting, difficult breathing and a slight degree of stupor. The dropsical effusion in the extremities and tumefaction of the face had increased; but my attention was soon directed to the great enlargement of the abdomen, which appeared to be nearly as large as that of a woman's at the full term of utero-gestation. On a careful examination, I found that the abdomen evidently contained a tumor of large size, the upper extremity of which could be well defined, but the lower part could not be so easily traced. The tumor did not reach so high as the gravid uterus in the latter months of gestation, but presented a greater anterior prominence at the central or umbilical region. Pressure upon the tumor caused pain, but evinced but little, if any, fluctuation. The wave-like impulse imparted to the hand in ascites, was wanting. Another feature was that the tumor changed in position with change of posture, presenting with more prominence at the side that was up when the patient lay upon her side, and *vice versa*, quite the contrary to what is the case in ascites where the fluid gravitates or spreads out in the dependent side. I now realized that I had a case different from any thing I had ever seen before, and which not a little embarrassed my understanding, as well as caused apprehension for the safety of my patient. After a protracted examination of the tumor, externally, I decided to make an examination, per vaginam, to see if any thing could be detected that would throw light upon the nature of the case. Passing the index finger of my right hand into the vagina, the walls of which were relaxed, I found the cervix uteri enlarged, of a globular form and pressing low down into the vagina. The situation of the os uteri I could easily detect, but it was firmly closed. By pressing my finger against the cervix, and grasping with my other hand the tumor through the abdominal walls, I had no difficulty in indentifying the true relation. A part of the mystery was now solved; the tumor was evidently intrauterine; its true character, however,

was not yet known. It will be perceived that on this decision depended the best hope of giving to my suffering patient permanent relief from her agony. The cause of the sudden and alarming symptoms, as the general anasarca with stupor, difficult breathing, nausea and vomiting, difficulty in voiding urine, etc., was well understood; they undoubtedly depended upon the mechanical pressure from the rapid enlargement of the uterus. I saw no way to give immediate relief to my patient, owing to the impermeability of the os uteri. I ordered an enema and decided to wait a short time to see if a change would not take place in the mouth of the womb, as the cervix was pressing low down in the vagina; bearing in mind, however, that the use of the trochar might have to be resorted to. I saw patient early on the following morning, accompanied by Dr. J. W. Kennedy; found her suffering severe pain in her back and through the tumor in the abdomen, which not a little resembled those at the beginning of labor; the intermission, however, was not so complete. The other symptoms, in the main, were about the same as the day before. The bowels had been moved from the use of an enema, and urine had been passed. But to my satisfaction I found a change had taken place in the os uteri, which felt softer and dilated sufficiently to admit the end of the index finger, the introduction of the latter, however, was impeded by a membrane that seemed to be attached to the inner edge of the mouth, and which formed a complete covering.

Believing, from the character of the pain and the change in the cervix, that nature was making an effort to relieve the womb of its contents, and that further dilation might be of incalculable advantage, we decided to wait a few hours before we ruptured the membrane. Giving some instructions to the husband and nurse, we left the house, promising to return again in a few hours, requesting to be notified immediately should any thing occur in the meantime.

I was again accompanied by Dr. Kennedy, on my return in the evening. The pain through the tumor and back and the general distress of the patient, were greater, if any thing, than in the morning. The dilation of the mouth of the womb had increased to about the size of a silver half dollar. We now decided that it was useless to wait longer, fearing the evil consequences of exhaustion from long continued and uninterrupted suffering. I introduced the index finger of my right hand into the vagina and



with some considerable effort ruptured the membrane that completely covered the mouth of the womb. Passing my finger full length into the uterine cavity, I was unable to detect any thing except that it was surrounded by a fluid which commenced escaping the moment the membrane was ruptured. On withdrawing my finger, immediately two gallons of what presented all the physical qualities of a serous fluid, escaped. After waiting a few minutes, Dr. Kennedy, at my request, passed the index finger of the left hand into the uterine cavity, but detected nothing within its reach. It may here be remarked, that the mouth of the womb was not dilatable beyond the admission of the index finger which it firmly grasped at its thickest part. As soon as the fluid passed the patient remarked she felt greatly relieved. Also, the distension of the abdomen was immediately diminished in a very marked degree. The enlarged uterus could still be distinctly felt through the abdominal walls, although much diminished in size. The fluid continued to escape, but less in amount during the time we stayed in the house, which was nearly one hour; at the end of this time the change in the woman's condition was quite amazing. Her breathing had become quiet, the pulse less frequent, the pain in the back and through the abdomen had almost entirely ceased; and her countenance, which had presented a worn and solicitous expression, was changed to one of composure, with cheerful looks of recognition of relief from her suffering. On the following morning, I found her in comparatively a comfortable condition. She had rested well during the night, and had passed urine without any difficulty. The discharge of serous fluid was still escaping at intervals from the womb, and from the nearest estimate that could be made, two gallons had passed since we left, making in all up to this time four gallons since the rupture of the membrane. The abdominal distension had greatly subsided as the womb had contracted and settled down in the hypogastric region. The mouth of the womb was dilated the same as when we ruptured the membrane, but nothing was found within reach of the finger when passed into the uterine cavity. These circumstances, at this time, together with the absence of any sanguineous or purulent discharge from the womb, led us to believe that the case was one of uncomplicated uterine dropsy; and the correctness of this opinion was subsequently confirmed by the favorable termination of the case. The stomach had become retentive and the general dropsical effusion was speedily subsiding. I now put the patient upon the use

of the *tinctura ferri chloridi gtt. xvi*, every five hours, which was continued for several days. At my visit on the second day after the rupture of the membrane, I found her not resting so well. I was informed that the discharge from the womb had stopped escaping some time in the night, and she was complaining more of pain through her abdomen. I also found by grasping the womb through the abdominal parieties, that it was more distended and reached higher than the day before. Passing my finger again into the vagina, I found the os uteri entirely closed; but with little difficulty I introduced my finger again into the uterine cavity. I now introduced a large sized gum catheter into the cavity of the womb and drew off immediately half a gallon more of serous fluid. As soon as the fluid passed, the patient was again relieved. I directed that the catheter be left remaining within the womb, securing, however, its free extremity. On the following day I found her in a very comfortable condition; had rested well during the night, was able to pass urine without any difficulty, and her bowels had been moved by means of an enema. The catheter had passed from the vagina during the night, but the discharge was still escaping at intervals from the womb. From this time on Mrs. K. made a rapid recovery; the womb contracted gradually; the abdominal distension consequently subsided, the general dropsical effusion disappeared speedily, and the discharge from the womb continued to escape at intervals, in diminished quantity, until about the seventh day from the rupture of the membrane, when it entirely stopped. She rapidly regained her strength and was favored with uninterrupted improvement until we saw her last, on the 8th day of this month, when she appeared to be again in the enjoyment of good health. Nothing nearer than an uncertain estimate can be made as to the quantity of fluid that escaped from the uterine cavity, in all, but we believe fifty pounds is not an over estimate.

Idiopathic dropsy of the womb is undoubtedly an affection of rare occurrence. Many physicians in the rural districts, perhaps never meeting with a case of it during a long term of practice. Indeed, some of the authors go so far as to express their opinion that as a primary affection, it never occurs. As a symptomatic affection, depending upon some morbid growth or structural lesion in the uterus, it is of more frequent occurrence.

There are two facts connected with the history of our case that are worthy of special consideration. First, the apparent sudden

onset of the disease, without any previously known pathological condition of the uterus. Secondly, the rapid enlargement of the womb and consequent great distension of the abdomen. According to statements of authors the accumulation in uterine dropsy takes place very gradually. So that the womb accommodates itself to its new condition without giving rise suddenly to any alarming symptoms; and especially is this the case in women who have borne children. The contrary to this was surely true in our case; the woman being the mother of nine children, and the accumulation undoubtedly took place very rapidly, not more than three weeks elapsing from the beginning of her complaining to the development of the most alarming symptoms dependent upon the great abdominal distension and mechanical pressure. Again, authors state that hydrometra is generally referable to some previously deranged condition of the uterus, as chronic metritis, polypus or hydatiform tumors, or to a general serous diathesis.

In the case of our patient, there was the absence of the symptoms indicating the existence of any of these affections. Her health was good up to the first of June; she had attended to her household duties since getting up from her last confinement, which occurred in December, 1869.

That the growth of the membrane covering the os externum was the determining cause of the accumulation, in this case, is no doubt true; but the circumstances upon which the development of the membrane depends, may not be rightly understood.

The causes of idiopathic hydrometra might with propriety be divided into predisposing and determining causes. The former consists in a pathological derangement of the normal secretion of the mucous membrane lining the uterine cavity. The latter consists in those circumstances that cause an obstruction to the escape of that secretion. In reference to the first, or predisposing cause, there may be an increase in the quantity secreted overbalancing absorption, and therefore constituting a dropsy. I believe it is a "fixed fact" in medical science that dropsy is the result of a want of balance between exhalation and absorption; more fluid being poured out than is taken up. It is rational to suppose that in women who have borne many children, the secretion from the lining membrane of the womb is greater than in those who have not borne so many. In the former, the mucous membrane is relaxed, muscular tonicity is weakened, and hence the greater liability to congestion and increased secretion. But there are other circumstances neces-



sary to the production of idiopathic hydrometra. So long as the passage from the womb remains pervious, no accumulation can take place within its cavity.

Not only may the secretion from the mucous membrane be increased, but its physical qualities may be changed; coagulable lymph may be deposited from the same cause, namely, congestion. I believe it is an accepted theory that in dysmenorrhea there is an exudation of coagulable lymph; a diphtheritic deposit that lines the cavity of the uterus, forming a deciduous membrane, and which is thrown from the womb in fragments during the menstrual crisis. May not the exudation of coagulable lymph, under other circumstances, form the basis for the development of the membrane that obstructs the passage from the womb? The membranous formation then becomes the determining cause of idiopathic hydrometra.

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**Diseases of Women.** Dr. Savage, in his work on the Surgery of the Female Pelvic Organs, says that "A vast proportion of maladies referred to the uterus are moral, mental, or marital. Such are not only rebellious to instrumentation, but are aggravated as well as protracted by any kind of treatment of that character." This is certainly a step in the right direction. We have, of recent years, heard far too much of instruments and operations in the diseases of women.—*Med. Press and Circular.*

**Dr. Horace Dobell**, in one of his communications to the *Medical Press and Circular*, on Pain at the Heart and in its neighborhood, dwells upon the significance of pain in the *pomum adami* which, according to his experience, "is one of the most fatal symptoms which we meet with in connection with diseases of the heart."

**The Lancet** speaks of a gentleman apparently practicing in England as "M. D., of Brooklyn University, America." It will be news to our neighbors across the East River to learn that they are entertaining an University, unawares.

## Translations.

*A Case of Multiple and Adherent Fœtuses.*

Translated from the German in the *Arch. for Gynecology*, Vol. I, No. 2, by HENRY ILLOWY, M. D., formerly one of the Resident Physicians Cincinnati Hospital.

By Dr. H. ROTHE, of Ploea.

Madam K. æt. 29, felt herself pregnant for the first time, since November, 1863. The only thing remarkable during the period of gestation, was the exceeding development of the abdominal tumor, so that the delivery of twins was generally expected.

Since the month of March, 1864, very frequent and unusually intense movements of the fœtus, which were generally confined to the left side, and only occasionally perceived over the whole abdomen, were observed.

Confinement was expected about the middle of August. The first pains were felt on the evening of July 30, but it was not until the next morning, July 31, that the midwife was called in, at which time, also, a large quantity of liquor amnii passed off.

According to the statement of the midwife, who, by the by, is an octogenarian, and tolerably dull woman withal, the face presented on her arrival.

When I saw the patient at five in the evening, I found her very much prostrated; the abdomen was very much distended; small parts of the fœtus clearly perceptible to the left, heart sounds could not be heard; the pains feeble and infrequent.

The completely dilated os uteri was drawn back over the head; the right cheek presented; the chin was directed anteriorly, and the forehead toward the hollow of the sacrum; the head was already at this time tolerably low down in the lesser pelvis.

Holding that an early delivery was indicated, I applied the forceps, meeting with no difficulty at all. Although the pains did very well assist the energetic tractions, still the head followed but slowly. Just as the face was about to be disengaged the forceps slipped off. Immediately the presenting part drew back and assumed its previous position. The same mishap occurred a second time. Only after the third application of the forceps did I succeed by means of powerful tractions in delivering the purple

face. Repeated respiratory movements were distinctly heard by me and those around.

I now sought to complete the delivery as rapidly as possible. The little pleasing result of all my endeavors was the bringing to light of the two arms. All attempts at extraction of the body of the fœtus proved futile. Meanwhile the pains becoming strong and energetic, and following each other in rapid succession, a third and right hand suddenly made its appearance.

The situation now become clear to me. Introducing my hand behind the head I seized the thorax and with that established some mobility of the body.

Making cotemporary traction and rotation, I succeeded now in disengaging the shoulders of a second child, with the head pertaining thereto, very firmly pressed in toward the left axilla, posteriorly and toward the right. The left shoulder lay farthest posteriorly. The delivery of the same with the head was attended with considerable difficulty, while the immediately following disengagement of the grown-together thoraces and abdomina, and then that of the hips, was easily accomplished.

The after-birth, of barely medium size, followed immediately after. The cord, 18 inches long, was centrally fixed. The children were both dead. Three hours elapsed from the first application of the forceps to the completion of delivery. The patient was very much exhausted, the uterus contracted well. There was considerable rupture of the perinæum, but feeling unable from sheer exhaustion to sew it up, I contented myself with placing the woman on her side, binding the thighs together and the application of cold compresses.

A few hours after delivery my patient felt very comfortable. During childbed, inflammation and ulceration of the vagina and vulva ensued, which subsequently healed, the ruptured perinæum united with the exception of a small spot at the anterior commissure. A year and a half afterward the same lady was delivered of a healthy child without any difficulty.

#### DESCRIPTION OF THE CHILDREN.

At the outset I beg leave to remark that I could not persuade the parents to leave me the children for transference to the museum. I had to content myself with having them photographed, also only a *sectio cadaveris* was allowed which I made twenty hours



post partum in the presence of the district physician, Dr. Grinebaum, of Beeskaw, where the birth had occurred.

Since the children were placed at my disposal for a few hours only, we were not able to extend our investigations as far as would appear desirable. I felt very sorry indeed that we could not examine more closely the course of the vessels, especially of those pertaining to the liver.

The children were both of the female sex. Their length was 49 centimeters. The child first delivered bore marks of putrefaction over various parts of its body and was of purple color. Both bore the evidence of being at term.

The shoulders of the children are in no way connected. Below these the breast-surfaces are united so that a line of separation can not be drawn any more between them. The one first delivery has the natural position, while the other seems to be drawn over to it by its breast-surface. Each child has two nipples.

In the middle of the united surfaces a common sternum may be felt, although between the clavicles a rudimentary manubrium for each child is to be found. From the breast, the growing together, if I may so express myself, goes over to the abdomen, and extends to the height of the loins.

In the region of the navel there was a deficiency of the abdominal coverings to the extent of a palm, which was only closed by a continuation of the sheath of the cord. The liver and intestines were plainly visible through the membrane immediately after delivery, though without forming at the time the sack-like protuberance that presented itself after the children were photographed.

At the loins the bodies again separated so that each had a distinct pelvis with lower extremities.

On the dorsal surface the union began about the middle of the ribs, and in such a manner that the right lateral surface of the one child passed over into the left lateral surface of the other child, at a moderately acute angle. By the formation of this angle a line of separation was drawn between the two children.

Each child had a firm and completely closed spinal column.

#### MEASUREMENTS OF THE HEADS.

*Of the first Delivered.*

Vertical,  $11\frac{1}{2}$  cen.

Transverse, 10 cen.

Longitudinal,  $13\frac{1}{2}$  cen.

*Of the second Delivered.*

Vertical,  $11\frac{1}{2}$  cen.

Transverse,  $9\frac{1}{2}$  cen.

Longitudinal,  $13\frac{1}{2}$  cen.

## BREADTH OF SHOULDERS.

*Of the first Born.*

11½ cen.

*Of the second Born.*

11½ cen.

## DISTANCE BETWEEN TROCHANTERS.

10 cen.

9 cen.

## DISTANCE BETWEEN ANT. SUP. SPINOUS PROCESSES.

9 cen.

7½ cen.

The length of the parts united is about 12½ cen., of which 7 pertain to the breast. The deficiency in the abdominal coverings is 6 cen. long, 8 cen. wide.

Underneath the navel protuberance a remarkably large liver made its appearance. On its inferior anterior surface, a superficial incision was observable, which, running along to its lateral borders and then upon these to its superior border clearly showed this organ to consist of two livers placed upon each other; a separation into the supposed natural two parts could not be effected, the tissue proving itself completely homogeneous. On the lower border of the liver were numerous incisions whereby a number of greater and lesser lobes were formed, which could not be brought in harmony with the usual nomenclature. A gall bladder was not to be found either on or in the liver. To the right and left of the liver and more toward its inferior border lay a spleen of the extent of a medium sized walnut.

After the removal of the liver we came upon two stomachs whose surfaces were not in contact. The duodenal extremity of both was turned inwardly, while their main direction was a horizontal one. Each duodenum continued on separately for a distance of about 22 cen., when they both united at an obtuse angle, and continued on with proportionate enlargement as a common intestine. This remarkable feature, having in common the intestinal tract, continued for a distance of about 105 cen., when it again divided into two distinct intestinal canals, running to the proper pelvis cavity of each child. There was then yet a moderate portion of the small intestines in the pelvis basin which passed over regularly and naturally into the large intestines ending in the rectum. At the point of separation there was naturally a free angle formed, and this gave opportunity, though the canal was perfectly permeable throughout to such an accumulation of mucus as to distend the common

tract to a considerable extent. The mucous membrane of the stomach and intestines was covered with a tough, glairy mucus. Meconium totally wanting. The kidneys on the side of the spinal columns, the bladders and the uteri, presented nothing worthy of note.

The thorax was opened by cutting through the cartilaginous portion of the ribs. The first thing that presented itself was an enormous pericardium, lying about the center of the thoracic cavity. We found it to contain two hearts, both normal in size, with their bases directed outward and their apices inward and somewhat downward. The two hearts completely covered each other, but were not otherwise connected. The heart of the second born child lay on top. The two opposing heart-surfaces were necessarily flattened. In all other respects both hearts were normally developed; from each one there proceeded an aorta. Nothing abnormal in the vessels entering the heart.

About 15 grn. of light yellow serum were found in the pericardium. Above the pericardium on each side lay an extensively developed thymus gland. Lungs were present. The lungs of both children lay in contact with each other and were not separated by a separate pleura. They were very much retracted and of dark color. Those of the first born child presented no difference in appearance from those of the second born; those of the first born child, however, which as had been stated above had respired, floated when placed in water, wholly or in sections, while those of the other child immediately sank to the bottom.

A few words only remain to be said of the relation of the bones. I have stated above that each child had a firm and completely closed spinal column. From this, on the outer side, the ribs proceeded to the common sternum; on the inner side, however, after running separately for a distance of a little over  $5\frac{1}{2}$  cen. they united at an acute angle into a cartilaginous mass, which, projecting into the thoracic cavity, partitioned off the space for the lungs of each child. The shoulders were natural, each with a clavicle, and these in each child united by a bone, presenting all the appearances of the upper part of the manubrium sterni. With this rudimentary sternum no ribs were connected. The common sternum was connected with the clavicles by a ribbon-shaped mass. The pelvis presented nothing remarkable. The cranial cavities could not be examined for want of time.



## Medical Societies.

## ACADEMY OF MEDICINE.

Report on Pharmacy, by J S UNZICKER, Chairman of the Section of New Remedies and Pharmacy.

**Pepsin.** It is due to the valuable experiments, lately conducted by Mr. Emil Scheffer, pharmaceutical chemist of Louisville, Kentucky, that we now possess a better knowledge of this remedy, as well as how it should be prepared. No wonder that many observant physicians have always contended there was no therapeutic value in the wine of pepsin. Their conclusions were right, for Mr. Scheffer has clearly proven that the alcohol contained in the wine destroys the pepsin. (*Vide Am. Jour. Phar.* 1870, p. 97.)

Consequently, no effects can be expected from a solution of pepsin in a solvent containing alcohol. Neither have I much faith in the dry pepsin, owing to its being mixed with half starch, which is apt to turn musty by the least attraction of moisture.

The gastric juice containing hydrochloric acid, induced Mr. Scheffer to adopt the more rational plan of preparing his liquid pepsin by using that acid and glycerine, a specimen of which I herewith present for inspection. The glycerine, in this case, not only acts as a preservative, but undoubtedly also produces a soothing effect on the irritated mucous membrane of the stomach. The dose is from one to two tea-spoonsful after each meal, in cases of dyspepsia, indigestion and vomiting of pregnant women. I am informed that the liquid pepsin, so prepared, has given entire satisfaction to many of the Louisville physicians who have prescribed it. It is my opinion that the profession have heretofore been greatly deceived by the so-called wine of pepsin, usually made from the rennet instead of the pepsin proper, and what little good they have seen, may have been more owing to the slight stimulating effect of some good old "Sherry," than any thing else. Rennet is made from the fourth stomach of the calf, and it is very doubtful whether identical with pepsin or not, because it has been proven that the most powerful pepsin is found in the carnivora,

and next to them in the omnivora. C. Schmidt has demonstrated that the gastric juice of the dog dissolves from five to six times more albumen than that of the sheep, and Claud Bernard's experiments have also given similar results.

Mr. Scheffer is still engaged in further researches on this subject, and I hope may soon be able to tell us what relations, if any, rennet bears toward pepsin.

### ***Incompatibility of Quinine and Veratrum Viride.***

Dr. Bradley, of St. Mary's, Ohio, reports, that when a patient is under the influence of veratrum viride, it is highly dangerous to administer quinine. The effects are most alarming; immediate sinking and irregularity of the pulse, which, in some instances, reaches collapse. He ran great risk of losing three patients before he became aware of the actual cause.

***Carbolic Acid Poisoning.*** Dr. Wallace, of Liverpool, publishes an interesting paper, on this subject, in the *British Medical Journal*, in which he states, that the most constant symptom is black urine. The urine does not become opaque; sometimes it is perfectly bright, and rarely contains albumen. It has been proved that this occurs in an equally marked form, whether tar, or some colorless preparation of it, be the agent employed. It has been noticed, over and over again, from carbolic acid.

***Glycerine.*** I recommend to the profession the use of this article instead of syrup, when prescribing medicines in a liquid form. My reasons are: that it possesses great solvent powers, and mixes well with most substances. That it acts as a great preservative to the medicine, by preventing fermentation and decomposition. That in the practice of children, especially, it counteracts fermentation in the stomach, acts as a nutritive and thereby greatly diminishes irritation in the alimentary canal. It has no superior as a vehicle for giving acrid substances, such as tincture of guaiac, turpentine, ammonia, chloroform, acids, etc. In prescribing glycerine for internal use, only the very best ought to be used, as an inferior impure article would only produce adverse results.

September 12, 1870.

## Hospital Reports.

*Cincinnati Hospital--Service of C. G. Comegys, M. D.*

Reported by J. R. GREEN, M. D., Resident Physician.

**Phthisis.** Julia G., aged 36. In an advanced stage of the disease; for the distressing night symptoms, took gr. xv of chloral at bed-time and repeated once during night, which always quieted cough, modified hectic and produced refreshing sleep; patient invariably felt better in the morning than before the remedy was used.

Clara M., aged 22. A very similar case to the above both as regards symptoms and result of the use of chloral, which was given in same dose.

Malinda N., aged 17. In a less advanced stage than the two preceding; violent, dry paroxysmal cough; promptly relieved by gr. xv as needed in the evening and same quantity every three hours during the day.

**Asthma.** Mary R., aged 24. In the ninth month of pregnancy. Has been subject to asthma for several years, and as gestation has advanced, has been constantly growing worse; has frequent attacks during day and is unable to lie down at night. Ordered chloral hydrate gr. xv in the evening; three doses produced the most decided effect; slept all night, and about the same quantity sufficed for two weeks to palliate the asthmatic symptoms.

Patrick F., aged 37. Has had a paroxysm of asthma about once in two or three months for eight years, has been suffering for past three days with a violent attack. The effect of chloral, in same dose as above, was most satisfactory.

**Delirium Tremens.** John B., aged 53. Has been a free drinker for several years, and had frequent attacks of delirium tremens. Was admitted in the evening, delirious, but not violent; marked muscular tremors; pulse 120 and rather feeble; tempera-



ture 102°; tongue thickly furred; pupils normal and respond to light. In the absence of the attending physician, I ordered bowels moved with enema and chloral hydrate gr. xx *tres hor.* and also to have beef essence freely. As late as midnight there was no change. The following morning, however, patient was in semi-comatose condition; face flushed, pupils contracted; no strabismus or paralysis; could be aroused sufficiently to answer questions in monosyllables; pulse 120, some force; respirations 18, somewhat labored but not stertorous; heat 103°, chloral to be stopped at once (having taken four doses), and when Dr. Comegys visited the ward a short time subsequently, the head symptoms being still urgent, an ice-bag was applied to head and ant. et potass. tart. gr. 1-12 to be given every hour. Coma gradually became more profound, and patient died without special symptoms 48 hours after admission. An autopsy was not allowed.

Alex. B., aged 35. A periodical drunkard for twelve years; well formed, muscular man, six feet four inches high; present condition results from a two week's debauch; has violent tremors and is wildly delirious; harassed by a variety of the most horrid spectral illusions; face flushed; pupils slightly contracted; pulse 98; heat 102°, tongue thickly furred. Bowels moved with mag. sulph. after which took gr. xv of chloral hydrate; in thirty minutes was asleep; awoke in three hours, and ate a hearty meal; still delirious; same dose repeated; slept for twelve hours and awoke perfectly rational.

The remedy was also employed with very marked success in a number of cases of *threatened* delirium tremens; indeed, in no class of cases were its effects less equivocal or more gratifying.

**Lead Colic.** John Q., aged 23. A most violent attack, gr. xiv of chloral relieved pain and caused profound sleep; but left patient somewhat delirious for two or three hours after waking.

**Rigor.** Owing to the theoretical analogy between the effects of chloroform and chloral, the latter was administered, in a few cases, in the cold stage of intermittent fever, with a view to cut short the rigor. The result appears to justify the belief, that this instance forms no exception to the general similarity of the effects of the two remedies, although a more extended series of experiments is needed before a definite report can be made.

## Correspondence.

*Brain Tumors and Roberts Bartholow, M. D.*

MR. EDITOR :

Those of your readers who read the invective by Dr. Bartholow, in the last number of the *Medical Repertory*, of this city, on my cases of brain tumors, published in the *Philadelphia Medical and Surgical Reporter*, July 9th and 13th, were doubtless surprised to see his want of common physiological knowledge and the feeble exhibition of medical scholarship. It is very plain from this and former attempts, that his role is not criticism ; his powers are best shown in case-making and defamation, and all quickly saw that the latter was the animus of his piece.

A just criticism, in which our errors are candidly set forth, is not only best for the science which we attempt to illustrate, but is of inestimable value to ourselves. All sincere men covet it. No sensible and honest man attempts to assume completeness of information on inexact science ; only shams and charlatans claim this ; and the most certain evidence of a quack, in our profession, is the pretension to universal information and positive powers in diagnosis ; add to these, plagiarism, mendacity, open or covert advertising, boasting of large success, slander and detraction of others, and the character is complete.

The chief intellectual trait of Dr. B. is a mediocere memory, which he has labored so hard to improve as to abate astonishingly his ability to reason ; so far has he carried this culture as to earn for himself the sobriquet of sponge—an organization, you know which only takes up a substance already in solution, and when squeezed returns it again *plus* some of its own *débris*.

Your readers, Mr. Editor, need not be told that the memory is only the raw material of thought, and that individuals who devote a large effort to its cultivation, are remarkable for deficiency of comprehension and reason ; so that examples are very frequent of men (self-made men), who, deficient in what is called thorough training in schools, and therefore compelled to exercise the faculties of observation, comparison and meditation, have achieved more distinction in leading positions in life, than the first scholar

of the college, whose training has been so largely the memorizing of the thoughts of others.

Pardon this digression, which is only intended to point out that in professional circles every-where, there is much annoyance felt from these machine men (*quidnuncs*) who constantly hunt up the recent sayings of eminent men and hurl them at you as the last word of science, when usually they are only the first, if, indeed, they contain any truth at all; a sort of smartness that often excites our surprise, but rarely commands our respect, for we know its superficialness.

Now to our subject. Dr. Bartholow avows, in the beginning, that he has been publishing my cases, prepared by *himself*—a fact which I was ignorant of (except that of John Murphy, case 1), until I read it in his article—cases which he never saw while living, and whose clinical history he has obtained from the hurried and imperfect memoranda, in the *House Record* made by young men who had only a short time previously entered upon their duties as resident physicians. Many of my clinical observations were not put down at the bed-side, and were forgotten by my assistant, when a more perfect record was made, a record which I did not supervise. But it would have been perfectly easy for Dr. B. to have obtained my information, if he had desired to publish any thing else than a travesty. What will your readers think of a physician, who, by fair means or foul, gets access to the case-book of your assistant, and rushes into print without asking your permission or doing you the poor favor of submitting the manuscript for your examination?

The medical staff of the hospital have unanimously denounced his course, and the Trustees gave such liberty of choice in regard to the pathologist who should make the *post mortem*, that Dr. Bartholow has not been called upon for nearly a year to make an autopsy and never will be again—such a forfeiture has he made of all claim to medical honor, not only by these publications, but in other ways while acting as pathologist; and, now at last we are informed that the Trustees have removed him from this position. He attempts to justify his conduct by saying, “that only one case was mine; that with two of them, I had only a casual or temporary connection.” As nearly every case brought into the wards, has had previous treatment by some one, he could apply the same remark to all; but every one knows that when a case is placed in my ward, I am responsible for the diagnosis and treatment thence-



forth. I will say now, however, that in case 2 (Rinke), I was not aware that Dr. White had lectured upon it; but I am glad to learn that this able clinician had, from the phenomena, located the brain lesion, as I supposed it to exist; when he studied it, there existed facial paralysis, but when I had the man before the class, no such symptom existed. We see these changes in facial phenomena often. I have a case now under observation, in which the well marked facial paralysis, at first, has nearly disappeared. But we shall see further on, that neither Dr. White nor myself have any reason to be ashamed of our diagnosis.

John Rinke was paralyzed on the right side; *no lesion whatever* of sensation, or motion, existed on the left side. If, then, the largest of all the cysts, the one compressing the right thalamus, as it did so remarkably, was a cause of irritation, should there not have been phenomena on the left side of the body? Certainly so; but as none existed, it is a proof that these cysts, no matter where located, made no serious disturbance in the functions of the nerve fibers. It is the boldest assumption, on the part of my critic, to say the small cyst, on the floor of the 4th ventricle, compressed the motor tracts of the right side of the body to such an extent as to cause the right hemiplegia of the face and the trunk. Dr. Carson, the regular pathologist of the hospital, did not think so; a man of acknowledged ability and whose honor is not tainted. Dr. Carson ascribed the right hemiplegia to the cicatricial tissue in the left *thalamus*. The error in diagnosis, which I confessed, was in supposing from the extent of the right hemiplegia and the aphasia, that the left *corpus striatum* and anterior convolutions were involved in organic lesion; but their lesion was functional, and reflected, doubtless, from the organic posterior lesion of the same side. The improvement in the use of the right leg, and faculty of speech, by the treatment, corroborate this view. Now, professional reader, have either I or Dr. White cause of shame for our diagnosis?

It is at this point that Dr. B. charges me with making up my history and diagnosis from *post mortem* revelations; yet he immediately after charges me with "calmly ignoring, as a factor in the production of the symptoms, the cyst in the 4th ventricle." "I" (R. B.), he goes on to say, "lectured on this specimen, and demonstrated to the class this cyst *in situ*, showing the deep indentation which it made on the left side, directly upon the fibers of the origin of the right facial nerve. We have in this fact a

complete explanation of the right hemiplegia and facial paralysis. But Dr. Comegys says the positive hemiplegia of the right side can only be explained by the strictural lesion of the left thalamus. According to this physiological and clinical professor, pressure on the left half of the medulla, just above the point of decussation of the motor fibers, could not cause the paralysis of the opposite side!"

If my faculty for history and diagnosis is so often exercised, as he asserts, after *post mortem* revelations, I must have forgotten my craft here. But, reader, he made no such demonstration before the class; he called their attention simply to its relation (the tumor) to the roots of the pneumogastric nerves, and asked, "What phenomena would likely be observed if these nerves were compressed?" He got a correct answer, nodded his assent, and passed on. Not a word was said of the relation of the cyst to the hemiplegia! But such tergiversation as this is a pastime with Dr. Bartholow!

But suppose an indentation did exist from the relations of this cyst, does it prove that the function of the nervous cord was impaired? No; for examples are abundant of the existence of a pressure of gradual growth and indentation without impairing function. Before my door is a thrifty silver maple. By its growth it has moved an immense curb of nine feet length, with depth and breadth to correspond, nearly three inches, outwardly, and against the lateral pressure of the solidly paved street. The resistance was immense, and the bark of the tree is deeply indented, yet its delicate tubes have remained pervious to the circulating sap.

Dr. B. says these cysts were *barren* cysticerci. Dr. Carson, after a microscopic examination, found none existing.

In regard to the case of Murphy (case 1), he goes on to say: "I find, on examination of the hospital records, that the diagnosis is stated 'degeneration of the arteries of brain.'"

I have before stated that this record is only the notes of a young physician, who had just commenced his duties. Dr. B. heard me state, in the Academy of Medicine, that the question of brain tumor was discussed in the diagnosis, and that I had requested an ophthalmoscopic examination to be made by Dr. E. Williams, in order, if possible, by the state of the retinal circulation, to differentiate structural changes from the presence of a tumor.

But he preferred using the imperfect notes, saying to Dr. Dawson, who offered him explanations, that he wanted "no *post hoc*

performances." He desired to misrepresent me, in short, to the profession. Against my protest and that of the whole staff, he sent his report of my case to the Ohio State Medical Society. In my report, published in the *Philadelphia Journal*, I specifically stated my diagnosis, which he says is another instance of my postponing a diagnosis until the autopsy has been made; yet, in another paragraph, says, "notwithstanding the flood of light the *post mortem* disclosure threw upon the case, our distinguished clinician, was unable to account for the symptoms!" First, I am charged with making history and diagnosis from autopsies; secondly, with inability to do such a thing!

*Modo me Thebis, modo ponit Athenis*, says Horace, alluding to the facility of the dramatist who had his hero so easily changed from one scene to another.

I stated in my report that Murphy had a reeling gait in walking, which I attributed to his double vision, due to the paralysis of the third pair of nerves, that is, to the loss of the vision as a guiding sense in locomotion; and I also stated that if the defective eye be bandaged the patient may walk straight. He says, in noticing this statement, among other foolish things: "As physiologist, does it occur to your comprehensive intelligence, that a tumor which pressed upon the *crus cerebri* and left side of the *pons* could cause disorder of muscular movement upon the right side of the body?" I answer, certainly, most veracious autopsist, if the strands were injured; but you only say in the record that they were "impinged upon." Then in the next period he asks, "Are you unaware of the fact that a man in the healthy state does not direct his feet with his eyes, in walking, that the muscular sense is his unfailing guide?" Yes, I am *unaware* of it, and so is every one else. Rope walking is at once a proof that the feet are guided by the eye. The visual and muscular sense, in a sound man, are interdependent in locomotion. It is the baldest fact in physiology. In somnambulism, we have though walking by the muscular sense alone; but serious accidents often occur in this strange state, for want of vision. The movements of the eye-ball are free and easy as long as we see; we are not conscious of muscular effort; but close the lids and then try to move them by the aid of the muscular sense, and it will soon become not only a painful effort, but you will not know in rapid efforts, which way you are turning them. Nevertheless, a man who has become blind,



after years of good sight, can keep them very straight, guided by recollections furnished by the muscular sense only.

But it is astonishing that my critic, after destroying, as he thinks, my theory, proceeds at once to say, that "this patient, as all in a similar condition do, had learned to *correct the disorder of vision by keeping the affected eye closed*." Now, he did not see this patient alive at all; and the patient had not learned to keep his left eye closed; besides, if the feet are guided by the muscular sense alone, why need he close the eye! A little reading of Carpenter, on Guiding Sensations, would give some healthy information on this topic. But more especially let me refer you to an authority which, while some may it lightly esteem, must be to you infallible, *e. g.* the symptoms in the case of the renowned Kelch, reported by Roberts Bartholow, M. D., etc., in the *Cincinnati Journal of Medicine*, May, 1866, where it is said, "in walking he can scarcely feel the floor, and when his *eyes are not fixed upon his feet he can not direct his movements*," because the use of the eyes in the ataxic is necessary to conduct his movements. "Yes," he will reply, "but Kelch was not a sound man,"—nor was John Murphy.

Again, he remarks: "Dr. Comegys consoles himself for his failure to make a correct diagnosis in his cases, by stating that the best writers say there are no pathognomonic symptoms of tumor, abscess, or softening of the brain." Yes, I repeat it, and utter but the opinion of such writers as the eminent Gull and Sutton, which may be found in so many words, in the article on Abscess of the Brain, in Reynolds' System of Medicine. I ventured to offer that in softening more blankness of expression and mental hebetude existed than in neoplastic growths, and any one who has seen such cases, will assent to my suggestion.

Let me say to Dr. B. that because suppuration may superinduce amyloid degenerations, it may not cause atheromatous decay, a very common one of the arteries; therefore, by the use of the seton, one does not necessarily injure arterial structure. At this point, the Professor might have indulged us with a little scholarship on the relation diseased arteries bear to destructive changes in tissues lying in their territory; and also, in referring to lesions of the duodenum depending on suppurating burns, he had a pretty opportunity for illustrating the interesting doctrines of pyemia, and, moreover, I suggest for his information, that this organ exhibits the destructive changes, the result of external suppuration, in only a proportion to other organs.

In regard to the whole range of phenomena resulting from altered conditions of functions of the vaso-motor nerves and the close relation they sustain to all the physiological and pathological processes, and of those agents which innervate or enervate this system, the Professor seems not yet to be prepared to understand; he appears to have looked up the crude facts of Bernard's experiments only, and I can not now, without making this article needlessly long, go into lengthy explanations, how what is called, in general terms, irritation, may now produce relaxation and again tonicity of the vessels, disturbing thus the functions of organs and chemico-vital acts; but in those fearful diseases, epilepsy and tetanus, he will surely see that irritation produces in the one case clonic, and in the other tonic spasms; and how many examples are there where irritation produces hyperesthesia, and anesthesia; and a great variety of subjective sensations, such as a sense of cold or heat, pricking, tingling, heaviness, lightness, mental pleasure or horror, visions beatific or infernal. The word, irritation, is employed to express everything that impresses the nervous system in such a way as to affect its functions. We could go deeper into this question, and assume from analogies in physical science, that all of the immense phenomena of sensation and motion result from molecular change, or altered polarity, of the ultimate tissues.

In dismissing my defense, I feel like calling the attention of my brethren to the similarity of this criticism of Prof. Bartholow, to an examination of a school-master, conducted by a pretensive quack-doctor, named Pudgey, who set up in a flourishing Western town. This character is drawn out at length in, I think, one of Emerson Bennet's novels. Dr. Pudgey was dropped out of the army at the close of the Black Hawk war. He had been in some way connected with the surgeon's service and seen a good deal, heard much, and had become *habile* in administering doses, dressing wounds, applying splints and bandages. Besides, he had learned to mouth the hard words of the occult jargon of doctors. He had also been intrusted with the care of the chemical test apparatus, and the microscope, and had learned to put frogs' feet and the antennæ of flies on the field of observation. He also laid open the bodies and took out the viscera for the surgeons at *post mortem* examinations. In short, Pudgey became quite *au fait* in practical matters. Of course, he soon attracted much attention in the growing, busy, little city. He is described as a small sized, very nimble,

square headed fellow, with black hair, flowing beard, uneasy eyes, and nose slightly pushed back at the point. The expression of the mouth was hid by a mustache. He pretended to cure every thing—the term, specialist, had not yet been used much. He soon found many admirers, and his success led him to assume the manner of a great swell. He kept on show, in his office, besides medicines, microscopes, electric machines, stethoscopes, syringes; and there were pigeons, kittens, bugs, and frogs, which he experimented upon to his admiring friends. But his greatest dodge was his turn-out, a coupé of two seats—on the back one he sat in state, usually book in hand, deeply studying science, or with folded arms, in solemn meditation. The gay street and busy throng had no charms for him. This was his advertising wagon, and the boy driving generally *happened* to fall into the train of a circus; a funeral procession of the patient of the older practitioners was always patronized. People looked at the absorbed man and said, there goes the great Pudgcy. But I know that space will not be allowed to give the examination in full; one question only I can now remember, either. “Do you know,” said Pudgcy, pompously, and everybody stared in wonder, “the formula for the multiplication of a parallax by the minus quantity on the right hand side of the equation?” “By George,” said one of the school committee, “that’s a poser. Pudgcy is the greatest man of the age.” Every one held breath. The young teacher turned pale; then getting intensely red in the face, he rose up, pronounced Pudgcy a humbug, with a profane prefix, and wrathfully left the house. Pudgcy from this climax of his eminence, gradually began to slide downward. He had assumed the astonishing boldness of immense ignorance, and failed.

The Professor has alluded, in terms of high commendation, to the name of my friend, Dr. James Graham, to whose fine parts we all cheerfully pay tribute; but it is questionable whether this apothetoid display is well received. The most valuable commendation can only come from one who is himself deserving of praise, “*laudari a viro laudato.*” But I beg my friend’s pardon for representing him on this scene; I hope he will not be offended if I think he must play a part which his laudator has given to him.

One of the most agreeable of my social pleasures is an interlocutory with this clinician and fine reasoner, in which I freely say mine is the *pars minima*. At his hospitable *foyer* in winter, or on



the porch in summer, where, like an ancient *philosophe*, he dispenses the sound formula of meditation, not only in medicine, but in the humanities and the chase, one often encounters editors, merchants, lawyers, bankers, mayors, modern Nimrods, and statesmen of the municipal legislature. Prof. Bartholow, to whose ability for absorption of crude knowledge, and also his lack of faculty for its digestion and assimilation, I have already made mention, found long ago in my friend's capacity the compensation so needed in himself; while the clinician has a just contempt for medical light literature, Prof. B. devours it with great avidity. The former obtains his medical lore from the heavy and sound quarterly and semi-annual repertoires, and what is so much better, his own careful study of phenomena by the bed-side; the latter *cramms* full of the late sayings of Gull or Charcot, or Niemeyer, or Schroeder von der Kolk, or Paul Topinard; but to arrange all this in suitable categories and then condense it into formidable syllogisms, is with him an impossibility. So he goes to the philosopher.

So simple and paternal are these conferences, that the favorite dog has caught the inspiration of the teacher's mood, and has been known when some new and more profound interlocutor has been his master's guest, to place himself in attentive attitudes, and with graceful rhythmical manner, keep time with the swell and lull of sonorous periods.

It is very manifest when these solemn and instructive meetings have been held by the better exhibition of mental co-ordination and unusual display of logical acumen by Prof. B., and if in attempting afterward to use these syllogistic arms he sometimes hurts himself, it is only another illustration of the old saw: children should not play with edged tools (*ne puero gladium.*)

Thither, then, goes regularly the coupé loaded down with its raw material, and there, while sitting in chair or in measured peripatetics, the patient and amiable philosopher brings it into intelligible shapes. The former serves as a dictionary, the latter as a ready reckoner. But, my friend, do not think I mean to offer these consultations as an exhibition of the *juncta juvant*. I do not think, for a moment, that you and your distinguished pupil are correlative quantities which, united, make the complete man. He doubtless astounds you with his collections of crude material and is in turn dazzled with the skillful way in which you forge the links of the armor which he seeks to wear, and repays you with

"gorgeous eulogy;" yet I do not believe it is a mutual admiration society, after all.

I feel in an excellent humor in regard to the Professor's criticism, and can not avoid, in closing up, bringing forward some ludicrous evidences of his frailties as a clinician and as an offset to my "glaring faults." It is an ungracious task to point out the defects of others; but I hope I will be excused if I attempt to show that he had some weak points.

For instance, it is well known here that in his earlier service at St. John's Hospital, a case of a young woman, for ovarian tumor; with a large swelling in the abdomen, was confided to his care; indeed, I think she was sent all the way from Baltimore, where the Professor had been occupied in hospital practice, and had doubtless gained some distinction in such affections. She was very anxious to be operated upon by a surgeon, and although this was not at that time one of his multitudinous specialties, he felt himself equal to the emergency. He was begged to operate before the class, and he made ready to do so, setting the time; but nature, in horror of this fell intent, delivered her *per vias naturales* of a noble pair of brothers!

Had he gone on, and I think the poor girl in shame would have submitted, there is not a shadow of doubt that he would have claimed it as a Cæsarean section, necessitated by a deformed pelvis, and quoted, in his most captivating manner, a hundred authors of distinction to prove the justice of his act. As it turned out, he tried to lay the fault in diagnosis on a distinguished surgeon.

Information on this subject may be had of the superintendent of the Samaritan Hospital.

Much laughing has been had over his diagnosis, recently, in a consultation with one of our oldest physicians, where, after a most elaborate examination of the case, with stethoscope, thermometer, æsthesiometer, sphygmograph, and some other "instruments of precision," and having collected a profusion of "factors," not one of which could be "calmly ignored," he descended to the consultation room. The venerable physician, alarmed at this fearful display of instruments, which he rarely used, being usually guided by the "*tactus eruditus*," and feeling sure that his hold on the family was in danger, drew an involuntary sigh and asked, with mildest meekness, "what he had made out?"

Now, the Professor had gotten so many "factors" in possession by his instrumental research, that he was confused by so simple a

question; he was prepared to answer quickly each result obtained by each instrument—he could have “differentiated;” but to come at him *en bloc*, to demand the “damned total,” placed him in the situation of a mouse in a tar barrel, *mus in pice*, a phrase which the old metaphysical polemics with grim humor employed when they thought they had put their opponents into inextricable positions. He was, in short, in a state of mental ataxia; a spasm of inco-ordination seized him; his usual mental infirmity superinduced, it is thought, by his original researches into the subject of locomotor ataxia! O, for the philosopher’s brains now! But quickly recovering, and determined that nothing should escape his “comprehensive intelligence,” he replied, “that there was not a shadow of doubt that the child had pericarditis, pleuritis, most likely pneumonitis, with hydropericardium and hydrothorax sufficient to displace the heart; in short, she was gravely ill!” The doctor had regarded the case justly as pleurodynia, and was amazed at the Professor’s comprehensive opinion! On the next day the little one was playing with her doll; the following day she was down in the parlor. “He, he, he!” laughed the old doctor, “I don’t swear, but I think the Professor belongs to the dampfool family.”

But let us take an instance in the use of medicines, by this teacher of *materia medica* and therapeutics, this—

Professeur digne  
De la rhubarbe et du sene.

In the report of the case of the ever-to-be-remembered Kelch, in that stupendous paper on Progressive Locomotor Ataxia, just referred to, he informs us that he gave the iodide of potash, because he had worked at gilding for ten years and was likely, therefore, to become poisoned by lead, and as Melsens had demonstrated that this substance could in the system be rendered soluble by iodide of potash, and eliminated, he had prescribed it. This assures us that the Professor conceived that the patient was lead-poisoned; but in strange forgetfulness of therapeutical logic, he tells us later that Kelch had never had *any symptoms* of lead-poisoning, except those which are like the symptoms of the disease under which he labored. Now, did this iodide, which he prescribed, bring about any soluble combinations with mineral poisons, or what did it do? What did he prescribe it for? His able Mentor has told him a thousand times that “a remedy is to be used in a present case, because it has proved valuable in similar cases before, and, not on any theory of a supposed relation between the nature of the dis-



ease and the mode of action of the remedy." May I not now say that the Professor merits the epithet—*Grahamii servum pecus*?

But I will now close, not for want of more remarkable material, but for fear of tiring, by saying all that can be said.

C. G. COMEGYS.

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[Letter from Prof. S. A. Norton.]

BONN (PRUSSIA), September 8, 1870.

Although it is vacation in the University, I am still working at analyses under a special arrangement with Prof. Englebach. I am alone in the laboratory most of the time, and sometimes feel as though I was out of the world. The weather for a month past has been *schrecklich* cold and rainy most of the time, so that it has been too disagreeable to walk about much.

I intend to set aside a week for a pleasure trip, as soon as the weather clears up and I get tired of work. As matters go now, I see and hear but little of what is going on around me. There are a dozen small hospitals in Bonn, and nearly a thousand wounded soldiers. I suppose the opportunity is splendid for a young surgeon; but I do not find any pleasure in visiting these hospitals, and so do not try to get admitted. I found out, the other day, that the Prussian pharmacopœia is different from ours. I had a cough and tried to find an apothecary who knew what hive syrup is, but did not succeed. Finally, I extemporized a mixture, which answered its purpose. From what I have seen of them, I should judge that the German pharmacies are under much better regulations than ours. The young apothecary is obliged to submit to an examination in chemistry and pharmacy before he is allowed to put up prescriptions. More than half the students in the laboratory were young apothecaries; but I am sorry to say that they were not very diligent students of chemistry. I am inclined to think that the German apothecaries in Ohio are not fair samples of their class.

There is a tremendous amount of brag here about German science, but it all comes about to this: that a dozen or twenty men are really first class, and that under the shadow of their reputation every dabbler assumes to be superior to the rest of the world. You have little idea of the assumption of these fellows, although

you may have had a little taste of it in Cincinnati. It runs through their whole life. In everything Germany is at the head of the world, in arts, science, letters, and just now the military bubble is full to bursting. I get provoked with Prof. Englebach almost every day from some disparaging comparison that he sees fit to make. Not long ago, I was told by a German student that America ought to assist Prussia in the present war, because our victory over the South was due to our German soldiers.

I believe that I am surrounded with circumstances more favorable than usual, but I must acknowledge that I am somewhat disappointed. I supposed that the Old World was so immeasurably superior to us in everything, that merely to see it was a complete education. It pays me to be here, in many respects, but there are a dozen American students who are, or were lately, here who had better be at home except in regard to the study of the language. They attend lectures on law, etc., when they hardly know enough German to buy beer and pretzels; and even when they are better acquainted with the lingo, they get little good of the lectures. For myself, I own that in Prof. Englebach's lectures I was more attentive to catch the meaning of individual words, than to comprehend the drift of his discourse. You understand that in the laboratory he speaks to me in English.

Then again, these students have to learn almost a complete vocabulary, which is of no use whatever in America. In chemistry, it is bad enough; but in the nice points of law and criticism, it is far worse. This is my private opinion, not to be published in the *Lancet*. The German literature is very rich in all matters of science, and I think it is worth one's while to master the language for the sake of the scientific publications; and I also think that after a man has learned all that our schools have been able to teach him, it is a good thing for him to come here and ripen; but these young Americans here are, for the most part, boys that could not pass muster at our High Schools. The German idea of education is so far different from ours, that an American boy is out of place here.

If a man wants to see the world, in order to talk big, when he is on his native heath, why, a three months' tour, visiting the museums and picture galleries, is all sufficient. In these things they beat us amazingly. The other day I went to Cologne, a city about the size of Cleveland. There they had a Botanic Garden, Zoological Garden, Museum, etc., which Cincinnati would be proud

of having. I suppose that in time we shall have them, but they cost comparatively so little, that we ought to set about starting them.

From this rather doleful view, let me turn to say that I work so hard that I have very little time to be discontented. I am in the laboratory about ten hours a day, and begin to feel that I have learned something in analytical chemistry. If my health holds out, I shall do about double the work I anticipated, but I shall cut off part of the time in order to do sight-seeing.

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*Case of Total Atresia Vaginal.*—BY DR. GARTNER.

A young girl, aged twenty-three, experienced for the first time molimina menstruat. in her 19th year, afterward followed by bleeding from the anus, which, however, lasted but a short time. Nine months before she was received into the Catharine Hospital, in Stuttgart, a swelling began to form in the left nates, out of which after an incision, a large quantity of pus and blood escaped. The opening did not close, while every four weeks blood issued from it. On examining the parts the external genitals were found to be but little developed; the labia majora were remarkably small, no trace of a vulva visible, the raphé hardly perceptible, while a smooth, even-formed, perfect occlusion.

Dr. G. made an incision into the median line, after which he inserted one finger into the opening, a catheter being introduced into the bladder and another finger into the rectum. The uterus was then pressed downward, a pair of scissors inserted and these opened in order to enlarge the opening. After a few spoonfuls of a bloody liquid had escaped, Dr. G. found, to his astonishment, that the fingers passed into the bladder. The operation was then abandoned. The urine passed on the third day through the bladder, the wound soon closed, and the menses appeared at the regular time through the fistulous opening of the nates.—*Wurtemb. Correspondence Blatt*, XL., 2, 1870.



## Editorial.

*A Day in New York.*—If a man only has twenty-four hours at his disposal to make calls in New York, he can, to be sure, accomplish a good deal; but it will require a good degree of system in his purposes. We recently tried the experiment, but with indifferent success; and though we have made a note or so, they are of rather an informal character.

A visit to Bellevue Hospital always repays for the time, even if one has but a brief hour at his command. The College building is in the Hospital inclosure, but we found it closed and had no opportunity for a run through its rooms. The University has completed a pleasant edifice, immediately opposite Bellevue, on Twenty-sixth Street; it only affords one Lecture Room—just as Bellevue College—the arrangement for clinics, at the hospital, permitting this plan. The Museum of the University is moderate—take it altogether, not by any means so complete or attractive as the Miami Medical College in Cincinnati. We heard Dr. Goulay give an interesting clinic to an audience of four students. We had time to look in at the Long Island College Hospital, in Brooklyn, and were reminded of a former impression, that with so excellent facilities and so good a faculty, there should be much larger classes than have been as yet secured for the college. Prof. Armor, of that Faculty, and well known in the West, now makes his home in Brooklyn, but was gone to “the mountains” for his summer vacation. Indeed, we had continued ill-fortune in attempting to visit New York doctors and editors—we failed in finding any of them. We had better success in hunting up publishers. At Wm. Wood & Co.’s we saw some of the boys and had a pleasant call; doctors visiting New York will always find that a good place to drop in. So, too, at the office of the *American Journal of Obstetrics*. Mr. Adams is genial and makes you feel at home in his sanctum. Mr. Herald, of the *London Lancet*, is truly one of the workers; and Western editors will learn some lessons by an hours’ sojourn in his office. We were glad to learn that the New York medical journals were all in a healthy condition.

Among Instrument establishments we found time to enjoy a look at the extensive material accumulated at the store of Otto & Reynolds, 64 Chatham Street; and an interview with Mr. Reynolds was refreshing, for he took good care that we should see all that was new or suggestive in his establishment.

A call at the door of Dr. Gunning S. Bedford, was a sad one. We had long anticipated the pleasure of consummating his personal acquaintance. The message greeting us as we sent up our card, was that Dr. Bedford was at the point of death; and but a few days afterward we read the newspaper telegram that the grand messenger had come, and that after a life of good service, and eminent good works, Dr. Bedford is called to a better world than this.

**American Wines.**—*E. A. Thompson.*—The southern slopes, on the Kentucky side of Cincinnati, are gradually becoming "vine-clad hills." Mr. Thompson is the successful pioneer in this culture, and is bringing the manufacture of wine to a very successful result. After his usual custom, the host of the "Hill-side" invited a number of his friends recently, to come over and do honor to the new vintage. Mr. Thompson knows how to do the courteous, on such occasions, and he *does it* without stint or reflection, and in such a way as both to gratify the taste and interest the understanding.

Just now Mr. Thompson is experimenting with a new process, by which the new wine is so aerated as to do the work of a year's fermentation in a few weeks. This is not only a time-saving operation, but a better article of wine is produced.

These wines are kept on sale at 76 West Third Street, in this city, and physicians are now able to procure varieties of American wine, made from the grape, at a cheaper rate than the vile compounds of whisky and logwood, heretofore known as imported wines.

**The Prize of One Hundred Dollars,** gold, offered in New York by the *American Journal of Obstetrics* for the best essay on the Morbid Anatomy of the Placenta, was awarded to the paper bearing the motto: "*Veniet tempus quo ista quæ nunc latent in lucem dies extrahat et longioris ævi diligentia.*" On breaking the seal of the accompanying envelope it was found adjudged to Jas. T. Whitaker, M. D., of Cincinnati.

**Errata.**—Dr. Dickey desires us to correct some typographical errors which crept into his case, reported in the July number, page 407, and which materially affect the sense. On page 407 is the word "*hevings*," it should read, *heaviness*. On page 408, 9th line, "*sediment*" should be *rudiment*, and 10th line, "*largest*" should be *layers*.

**The Ohio State Medical Society.**—In the last number of this journal we furnished our readers with an extra sixteen pages, in order to give "the History of Medical Organizations," read by the Editor to the State Society meeting in Cleveland. We did not care to occupy so much space of the journal otherwise than as extra matter; and yet we doubt not very many physicians of Ohio will be glad to have these statistics. We have some items additional, that we shall arrange in due time, and if any of our readers can furnish us with the proceedings of the Convention, for 1845, we will be under obligation, as, indeed, for any historical matter overlooked.

**The Use of Carbolic Acid in Smallpox.**—Several communications have appeared in the journals latterly, indicating the value of carbolic acid as an internal remedy in the treatment of variola. We gave a selection of this sort in a recent number. We recur to the matter again that we may do justice to one of our Ohio physicians, Dr. Thomas W. Gordon, of Georgetown, who made the same suggestion to us long ago, in a private note. We allude to Dr. Gordon's early use of carbolic acid in this way to do him credit for his originality, as, so far as we know, no one had then proposed it.

**San Diego, California.**—The physicians of San Diego have formed a medical society, to the end that harmony and professional culture may abound. This is the true plan; every village or county should have its medical society. Good feeling and the respect of the community is vastly promoted. Dr. D. B. Hoffman was elected President, and upon assuming his duties made an appropriate address.

**American Journal of Obstetrics.**—Just as the number of this excellent Quarterly, for May, was ready for mailing, the whole edition was destroyed by fire. We are happy to say that the edition has been reprinted, and we have received our number in good condition and much to our satisfaction.



*The Medical Times* is a new semi-monthly journal of medicine, the first number of which dates with October 1st, and is already on our table. It is a sixteen page, double column journal, and filled with the usual variety of lectures, original papers, miscellany, etc. It is in all respects creditable to the publishing house of Lippincott & Co., and will doubtless receive a good support and yet not sap the strength of existing journals. Price \$4 a year.

*Godeys' Lady's Book* retains its old position of favor with the ladies of America. Perhaps no magazine of the class has met with such continuous and remunerative patronage. Price \$3 a year. Address L. A. Godey, Philadelphia.

*Instructions in Physical Diagnosis.*—Dr. Wm. Carson announces that he will repeat his course of private teaching this winter. The course is eminently practical, and illustrated at the bedside.

*A Location for Sale.*—We call attention to the card in our advertisements of this month. We know the location to be an excellent one.

*Every Doctor* likes a little laugh, now and then, albeit we are a grave and solemn people. The *Reporter* has the following:

"The old proverb says, 'Every man is a physician or a fool at forty.' Sir Harry Halford, a distinguished physician, happening to quote this old saw to a circle of friends, among whom was Canning, the latter inquired, 'Sir Harry, may n't he be both?'"

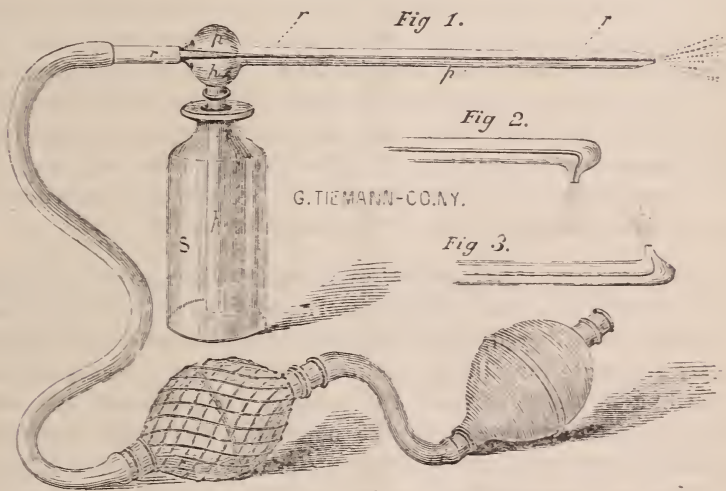
The *Medical Gazette*, however, is beyond admonition, except from the most intimate and trusted friends; thus he speaketh:

"*Up to Snuff.* Dr. John C. Murray, in the *Medical Press and Circular*, asserts, with some positiveness, that snuff-taking not only prevents bronchitis and consumption, but sometimes at least exerts a curative action on these complaints. Without expressing an opinion *pro* or *contra*, we may remark that it is a treatment every practitioner ought to be 'up to. Or take this in the same number."

*The Homœopaths* are collecting experimental "provings" of nitro-glycerine, a remedy which we say ought to be the "*similium*" of the depressed state of feeling caused by a severe "blowing up."

## Selections.

**Newman's New Glass Atomizer.**—We take the following description and wood-cut illustration, from a recent number of the *New York Medical Record*:



The atomizer of Dr. Robert Newman, of New York, is constructed on the principle of one capillary tube inclosing another. The double-air chamber of the rubber tube presses the air through the inner tube *rr*, and directs the spray. The same movement exhausts the air from outer tube *pp*. As soon as there is a vacuum in the outer tube, the fluid from the vial *S* is forced upward into it, and surrounds the inner tube. The continued pressure forces the fluid through the small opening, and produces the spray. The fluid is carried in the outer tube—the air, which atomizes, in the inner tube. The opposite mechanism, that is, the inner tube carrying the fluid, and the outer the air, will produce the same effect. Instruments constructed according to the latter theory have been made by the same artist, and work well. These atomizers are made

to direct the spray in different ways: upward, downward, or straight forward. Either of these directions is produced by the end of the inner tube, which conveys the air. But in either case the instrument is only ONE piece of machinery.

Fig. 1 represents the straight atomizer in operation; *p p*, is the outer tube; *r r* inner tube. *S* the vial with the medicated fluid.

Fig. 2 is the end of an atomizer downward for the larynx, etc., and Fig. 3 the end of an atomizer which sprays upward for the posterior nares.

These instruments possess many advantages over all the other patterns in use now. They are clean, always keep so, and they do not decompose the solutions; produce a finer spray, thereby not irritating the parts; never need repairs, always keep in order, and are cheaper than other contrivances. They are not patented.

The idea for the construction of these atomizers was given by Dr. Robert Newman, of this city, and after repeated trials and experiments was executed by Mr. Demuth, the artist in glass.

The instruments are for sale at the well-known instrument makers, Geo. Tiemann & Co., 67 Chatham street, N. Y.

**"The Sayre Malpractice Case."**—Margaret S. Welch, by her guardian, John F. Welch vs. Lewis A. Sayre.—This action, it will be remembered, was brought to recover twenty thousand dollars damages for alleged malpractice upon the person of the plaintiff, a child then (April, 1868), about six years old, who was suffering from an abscess in the neighborhood of her left hip. Application was made to Dr. Sayre, the defendant, a well known physician, of long standing in this city, who performed the operation, puncturing the swelling, and causing a large quantity of pus to flow out. This operation was performed in the presence of Dr. Gross, of Philadelphia, Dr. Neftel, and Dr. Paine. Welch, after conferring with his family physician, one Vaughan, who also held a consultation with two other physicians, J. M. Carnochan and Willard Parker, refused to submit his daughter to further treatment, the latter medical gentlemen claiming that Dr. Sayre had punctured the hip-joint, causing the synovial fluid which lubricates the joint to escape, laming the child for life. Welch, on the strength of this, instituted proceedings, which came up for trial before Judge Jones in the Superior Court, and, on motion by the plaintiff's counsel, the case was referred to William Traphagen, Benjamin Estes, and John Swinburne, M. D., to take testimony.



On the trial before these gentlemen it was ascertained that Vaughan was no graduated physician, but had merely been employed in one or two drug stores; and the testimony of Drs. Carnochan and Parker showed that they had made no microscopic examination of the alleged escaped synovial fluid, which could not be distinguished from serous fluid without the aid of a microscope. The referees reported that they were satisfied that all proper skill and care had been taken in the medical treatment of the patient; that she had not been in the least injured, but much benefited by the operation; and declared the defendant entitled to judgment. This report was confirmed by the Court, which, on motion, granted to the defendant an extra allowance of five per cent. on the amount claimed in the action. The case came before the Court again yesterday, on an order requiring the defendant to show cause why John Swinburne, M. D., one of the referees in the case, should not be removed and another appointed in his place, on the ground of his alleged incompetency. The Court denied the motion, with ten dollars costs.—*New York World*, June 19.

***Echinococcus of the right Kidney mistaken for an Ovarian Cyst.***—A woman, forty-two years of age, suffered from a swelling in the right hypogastrium for about sixteen months. On making an examination, the tumor was found to be movable laterally, of the size of a man's head and fluctuating. It being considered an ovarian cyst, the operation of ovariectomy was resolved upon. On puncturing the tumor a clear, watery liquid came away, causing a doubt as to the correctness of the diagnosis. On going further, extensive adhesions were found to exist between the tumor and the intestines which were separated with great difficulty. In order to ascertain the true nature of the swelling, the sac was opened to the length of a finger, when two echinococcus membranes appeared. The operation was immediately interrupted, although a portion of the kidney had to be left in the cavity; twenty-two ligatures were applied. The same dressing as in ovariectomy was employed. The patient died after twenty-six hours —*Archiv. f. Gynæcol. I., p. 146, 1870.*

***A Useful Prescription*** for the exhibition of the salts of morphia, in cases where they would, given singly, cause nausea and vomiting, is the following: R. Morph-sulph. gr. j.; Ext. aconite rad. alc., gr. ii; ext. belladonna, alc., gr. iij; ext. hyoscyamæ, gr. iv. M. Ft. pil. no. viij. Signa—one every half hour till relief of pain.

***Menstruation and Hemorrhage.***—We have long heard much of hemorrhage replacing menstruation. The term, "vicarious menstruation," is in common, perhaps too common use. Dr. Chapman has observed, and no doubt many of our readers have also, cases in which so far from the hemorrhage (whether pulmonary, enteric, hemorrhoidal, or otherwise) simultaneously with menstruation should be carefully distinguished from the so-called vicarious ones. Dr. Chapman offers, further, an explanation of the simultaneous discharges of blood which has led to a treatment he has found successful. He says:

"As a general rule, when any special condition of the circulation of the blood in any part of the body occurs—any grade of anæmia, hyperæmia, or congestion, for example, there is a tendency in the organism to extend that condition to adjoining or surrounding parts, the parts immediately contiguous partaking of that condition most completely, and those more remote less so in proportion to their distance. Thus, for example, the local hyperæmia and ultimate inflammation known as a common boil is characterized by a gradual diffusion of the morbid condition throughout the surrounding parts—that condition becoming less and less marked in the circumjacent parts increasingly remote from the center of inflammation until at length it is no longer perceptible. Now, such I hold to be the case in respect to the nervous as well as in respect to all other vascular structures. Assuming that it is so—and I presume no one will deny the correctness of this assumption—we have, I think, in this fact, rightly interpreted, the explanation of the tendency to simultaneousness of the discharge in question.

"The phenomena of menstruation, if not actually of nervous origin, are certainly very intimately connected with the functional activity of the nervous system. During the times between each catamenial period the ganglionic nervous centers, functionally related to the womb, are acting with that amount of energy which is necessary to maintain the uterine arteries in that state of constriction which is incompatible with the exudation of blood from the uterine-mucous membrane, or menstruation; but that the energy at length becomes exhausted; the nerve currents from those ganglia to the muscular coats of the uterine arteries gradually weaken, those muscular coats therefore relax, the arteries dilate and become more voluminous, there is consequently a greatly increased afflux of blood in those vessels, the whole womb becomes

turgid, and the menstrual fluid results. After a period of rest differing in duration in different women, the sympathetic ganglia recover their energy, and, by again effecting the contraction of the temporarily relaxed and enlarged uterine arteries, cause the flow to cease. Now, when the nervous ganglia in question assume a condition of paresis, and becoming anæmic, take (if I may use the phrase), their monthly rest, their temporary condition of anæmia is usually extended, more or less to the neighboring ganglia. If, however, certain ganglia, though less near to those primarily affected, are from any cause more susceptible to disturbing influences, they will tell even more distinctly of that influence than will those which are actually the nearest to the focus of disturbance. Whenever this propagation of vascular conditions of the nervous centers occurs, the peripheral parts to which those centers are functionally related will have their circulation correspondingly disturbed; and if the peripheral blood-vessels of those parts—the mucous membranes of the bowels or of the bronchial tubes for example—be in any given case especially feeble, hemorrhage from them is likely to occur, and often does occur.”

Holding this hypothesis, by way of explanation of cases of simultaneous hemorrhage, Dr. Chapman treats them by application of heat to the appropriate part of the spine by means of the spinal water bag. So far from regarding such hemorrhage as in any sense vicarious, he does not hesitate to put an end for a time, to the menstrual flow itself by means of heat, if doing so should prove a necessary condition of arresting the simultaneous hemorrhage.—*Med. Press and Circular.*

***Epidemic Diphtheria and its Treatment.***—According to reports from the state of Ibraila, the epidemic of diphtheritic angina which raged in that town sixteen months ago produced 700 deaths up to the 15th of December last, of whom 298 were men and 402 women. In a population of 30,000 the gravity of the epidemic may be estimated. Perchloride of iron, given conjointly with tonics, seemed to be most efficacious, and cauterization with a concentrated solution of nitrate of silver was found very useful when the pseudo-membranous exudation was localized.—*Medical Press and Circular.*



**On Suppositories.** BY HERMAN KOCH.—As the application of medicinal substances in the form of suppositories seems to be growing in public favor, I beg leave to make a few suggestions for the benefit of such practitioners as are not supplied with metallic molds, and may not possess facilities for obtaining the same. The following plan for obviating the use of the latter, which I have followed for some time, gives a product of uniform size, shape and weight, and; besides being cheaper than metallic molds, possesses the additional advantage of never spoiling the product by splitting or detaching pieces from the sides.

This is my plan: Take a piece of soft wood, cut in the rounded, conical shape of a suppository, allowing a portion of the wood in the center to extend beyond the larger end as a handle; roll a small square piece of waxed paper around the cone-shaped end of same, slanting off toward one of the corners. Secure the latter by a drop of mucilage, and the point by a vigorous twist between the fingers. Remove the paper and lay aside until the mucilage is dry, then reinsert the wooden cone, mark edge of same on the paper by encircling closely between thumb and forefinger, and lastly trim off close to said edge with a sharp knife. Keep the molds thus formed in a cigar box, the lid of which has been perforated with two or three rows of small round holes, which will serve to keep them in a vertical position when used. I generally keep on hand three sizes of molds, holding respectively one, two and three scruples, and mark the wooden cones accordingly. These molds can not be used more than once, but can be so readily reproduced that this is scarcely a disadvantage.—*Cincinnati, May, 1870.*—*American Journal of Pharmacy, July, 1870.*

**Treatment of Chronic Dysentery, with large doses of Powdered Ipecac.**—Subjoined are brief histories of three cases of chronic dysentery, treated some years ago, when on the Pacific coast, by W. E. WHITEHEAD, M. D., assistant surgeon U. S. army.

CASE 1.—N. M., white, single, aged thirty-six years, sailor. Came under my observation and treatment in April, 1868; much reduced in flesh and strength; loss of appetite; frequent mucous and bloody stools, often as many as twenty-five a day. Three years previously, while in Australia in the mines, had a very severe attack of dysentery, with fever; was then sick for nearly three months; when sufficiently strong, he left the mines and

went to sea, but did not fully recover his flesh and strength, and for three years had daily from five to twenty-five small, watery, bloody, and mucous discharges from the bowels. Upon examination, I found he had soreness in the left iliac region; no piles or ulceration about the anus; appetite capricious; tongue coated and slimy; skin dry; urine scanty and highly colored.

*Treatment.*—To take a warm salt-water bath twice a week; to eat soups and farinaceous food, with milk and weak green tea; no spirits or fermented liquor; to wear flannel at all times; to sleep in a warm, dry, and well ventilated place. To take *R. pulv. ipecac*, grs. xv, three times a day.

At the end of one week his condition was much improved; his stomach now tolerated the large doses of ipecac; the discharges from the bowels were less frequent and more solid; appetite, spirits, and general condition much improved. He said that he felt more like doing his duty (general hand on board a small Government schooner) than he had done for several years. Continue the powdered ipecac in twelve grain doses three times a day; no change made in the general treatment. At the end of ten days more he was so much improved that he did not think it necessary to take any more of the powders; but I concluded to continue them in doses of ten grains twice a day; to take one as soon as he arose in the morning, and one just before retiring to bed at night. This was continued for two weeks, with advice to begin the use of solid food. At the end of this time, or about the fifth week of the treatment, N. M. was much improved in strength and flesh, good appetite, digestion good, from two or three healthy alvine discharges in twenty-four hours, secretions normal and healthy. Cured.

CASE 2.—S. R., white, single, aged twenty-eight years, sailor in the revenue service. Was sent to me for treatment by the captain of the revenue cutter, Joe Lane, in June, 1868. Four years ago had fever and dysentery while in China; had then been unfit for duty for three weeks, when he went to sea, and his general condition improved, got rid of the fever, but has had dysentery discharges continuously since the first attack—an average of five discharges daily, frequently bloody and slimy.

Physical examination revealed decided tenderness over the course of the large intestine, and several ulcers just within the margin of the anus. Appetite fair, tongue red on the edges, thickly furred in the middle; some loss of flesh, and a general

feeling of languor, with loss of strength and vigor; the skin lacked its natural elasticity; urine normal.

*Treatment.*—To take a hot salt water bath three nights a week, just before going to bed; to eat such nourishing food as best agreed with him; to eschew all kinds of intoxicating liquors; to wear flannel next his skin; to sleep in a well ventilated, dry, and warm room; to take fifteen grains of powdered ipecac morning and evening, on an empty stomach. At the end of eight days he was much improved; discharges from the bowels more consistent and much less frequent; general condition much better. Continue the ipecac in ten grain doses twice a day for a week. Reported at the end of the week so much improved that he desired to be returned to duty, as his ship was short-handed. To take every night, at bed time for two weeks, eight grains of powdered ipecac. Was seen again in three weeks, entirely well, and about going to sea on a cruise. Cured.

CASE 3.—T. R., white, single, aged forty years, sailor in the merchant service. First seen in August, 1868. Two years ago he had an attack of dysentery in Chile; was then very sick for one month, when he left for the north, and had not been able to do any heavy work since; had been compelled to abandon the sea. He presented a very unhealthy appearance: skin of a bad color, lax and bloated; great tenderness on pressure over the entire abdomen; no piles or ulceration about the anus; urine highly colored and scanty; appetite capricious, strong desire to eat whatever disagreed with him; thirst considerable; tongue red and dry most of the time; strength much reduced; flesh soft and flabby.

*Treatment.*—To take a sea bath daily during the summer, as had been his habit; diet to be light and nourishing; to drink two glasses of grog a day; to wear flannel next the skin; to sleep in a dry and warm bed. To take eight grains of powdered ipecac three times a day for one week; then, twice a day for one week; and then, once a day (at bed time) for another week. Reported at the end of the third week very much improved in general health; ordered to stop taking the powders, and take ten drops of the muriated tincture of iron, morning and night, in a wine-glassful of water. When seen again, in three months, was well, and had shipped for a voyage to sea. Cured.—*Pacific Medical and Surgical Journal*, June, 1870.



***Lancing the Gums in Dentition.***—II. Gibbons, M. D., in the *Pacific Medical and Surgical Journal*, says :

“There are three objections to scarifying the gums : First, the pain and struggling of the child ; second, the increased difficulty of teething arising from the cicatrix ; third, the danger of hemorrhage.

“As for the pain, it is trifling, and unworthy of notice. The consequent relief is much more than sufficient to counterbalance the pain. Often the itching of the gums is so intolerable that the impression of the lancet is agreeable. I have known a child to close its jaws on the instrument, and press it into the gum with evident satisfaction.

“The struggling of the child, and its fright, are of greater importance, especially if the operation be bunglingly done, as is often the case. There is but one right way of doing it. Take your seat behind the child, as it rests on the nurse’s lap in a proper light, and, placing your knees toward its back, draw its head down between your knees. Let the nurse hold the infant’s hands. What with your knees and your two hands, the head is now completely under your control. Grasp it between your two palms, and, as it opens its mouth to cry, thrust one or two fingers of the left hand in its mouth to keep the jaws apart, and use the lancet with the other hand. By this method, you have the most perfect command of the head, and can cut exactly in the spot, and to the extent you desire. I am thus precise in the description, because I have so often seen the operation so awkwardly undertaken as to fail of its purpose, and to endanger serious wounding of the child’s mouth.

“Some writers have recommended cutting down on the outside of the gum, toward the root of the tooth, and not on the ridge, in the perpendicular direction, toward the crown. If the gum be much swollen, and the tooth deep, this plan may answer.

“In some cases, it is sufficient simply to relieve the distention by scarifying, without cutting down to the teeth. The loss of a few drops of blood in this way is often eminently useful, aside from any topical effect.

“The second objection, namely, the cicatrix, is scarcely worth a serious refutation. When we consider that the tooth effects a passage by inducing absorption of the gum through pressure, it is evident that absorption will be more easily accomplished where there is a cicatrix than where the tissue possesses all its original vitality and power of resistance. Repeated incisions, therefore, have an

effect opposite to that which the popular mind ascribes to them. By weakening the vitality of the tissues, they facilitate the exit of the tooth.

"The idea of induration, as attached to the cicatrix, is probably fallacious. I have never observed any induration of the gums after scarification, perhaps because they heal so speedily, and are kept constantly moist.

"Finally, we come to the most important objection—the danger of hemorrhage. This is of rare occurrence. In an experience of more than forty years, during which it has always been my practice to use the lancet freely in dentition, not a single instance has occurred to me. I have heard the same testimony from my father, after forty years of practice, in which he never hesitated to lance the gums of a teething child.

"Nearly forty years ago, this subject was canvassed in the Medical Society of Wilmington, Delaware, of which I was then a junior member. My recollection of that discussion is distinct. Eight or ten physicians were present, some of whom had been many years in service. The practice of cutting the gums was then universal. And yet, not a single case of fatal or dangerous hemorrhage, from lancing the gums, had occurred to any one of them, and only one case had come within their knowledge. A child named Collins, the patient of a physician then deceased, had been visited, in consultation by several of those present, and died, after a number of days, of hemorrhage.

"But the experience of others is not uniformly of the same tenor. My friend, Dr. Hatch, of Sacramento, in a paper read before the Medical Association of that city, mentions four cases of hemorrhage following incision of the gums, which have come to his knowledge, all of which proved fatal. In these cases, however, there was pre-existing disease, which, in all probability, would have destroyed life, had the gums been left intact. Further, they had been treated with calomel, until the peculiar effect of that agent on the blood appeared to be fully established. Dr. Hatch infers that the operation should never be performed on anemic children, or on those whose appearance might lead to a suspicion of the hemorrhage tendency; and that it should be particularly avoided in patients under the influence of mercury.

"The experience of Dr. Hatch is exceptional, and not to be accepted as a guide, in regard to the frequency of hemorrhage from this cause. It is extraordinary that so many cases should have

fallen under the observation of a single practitioner. There have been deaths from hemorrhage resulting from the extraction of teeth—perhaps as large a proportion as from cutting the gums. The same may be said of many other minor operations. But such extraordinary accidents are not allowed to deter us from operating, when occasion presents. I therefore conclude that the irritation of the gums from teething is so much more dangerous, under all circumstances, than the cutting of them with the lancet, as to justify the operation, without regard to consequences.”

***Female Students in Russia.***—It is stated, in the *Medical Times and Gazette*, that the Russian Government has decided to admit women into the Medical University of St. Petersburg, after passing an examination. They are to be taught *apart* from the male students, and are limited to a course of study of four years. Those who pass the required examination, will receive a diploma as midwife, which confers the right to practice. The wisdom of the Russian Government in thus providing for the separate education of the sexes in medical subjects, will be highly appreciated by those who comprehend the indelicacy and impropriety of educating them together.—*Ex.*

***Medical Co-Education of the Sexes in Chicago.***—Dr. Davis announces, in the *Chicago Medical Examiner*, that the Faculty of the Chicago Medical College, having tried the experiment of the medical co-education of the sexes, for the past year, will no longer receive female matriculants. He states, the ladies were well treated by the young men, and that no serious difficulty occurred, but that patients objected to appearing in the clinic before mixed classes.—*Ex.*

***Combination of Chloroform with Opiates, for Relief of Pain.***—In Braithwaite's *Retrospect*, No. 60. page 227, is an article on this subject, by Dr. William Marshall, and as it can not be uninteresting to many readers at this time, when *chloral* is attracting so much attention, I propose to give some of the results of my experience with it.

Ten years ago I was induced to make trial of a combination of chloroform with opiates, at the suggestion of my colleague, Dr. E. Thompson, who often prescribed it for the relief of pain. My first experiment was on myself, when, in a fit of colic from indigestion,



I took half a teaspoonful of chloroform with as much laudanum, and experienced immediate relief; falling asleep, and sleeping for three hours; after which, I suffered with some nausea, but no headache. After this, I prescribed this size dose, or even double the amounts, in many cases of colic and severe pain from other causes, and most invariably with the same satisfactory results as in my own case.

While surgeon of the first regiment of Tennessee cavalry (C. S. A.). I had often to treat severe cases of colic, and almost invariably relied upon this combination, assisted by hot applications to the bowels, which I usually made by dipping a flannel cloth (usually a soldier's shirt) in hot water, and applying it as hot as it could be borne. I often, in the severest cases of colic, and the passage of gravel, gave as much as two drams of the chloroform before obtaining relief, and never saw any unpleasant effects therefrom, save slight nausea, and occasionally a little headache.

I will give two cases:

1. While in camp, at Trousdale, I was called in great haste, to see Robert Thompson, a very stout Scotchman, whom I had before seen laugh at the tender care of the surgeon in adjusting a very ugly rent in his scalp, made by an oar thirty-six hours before, and which, at least, *appeared* very sore—he declared that he “did na mind a bit o’pain.” I found him writhing in agony, and “crying like a child.” He declared that “fire and butcher-knives were all in his bowels.” I gave immediately chloroform and laudanum, f. ʒ i. aa, and made the hot application, as before mentioned, as soon as water could be heated. The pain being not altogether relieved, but returning in severe paroxysms, I repeated the same sized dose in fifteen minutes, soon after which he fell asleep, and slept soundly for six hours, after which he suffered from slight nausea, which was relieved after the action of a saline cathartic.

2. While retreating from Dalton to Atlanta, under Gen. Jos. E. Johnson, I was summoned, at night, to see Sergeant——, who was in great pain, and evidently suffering from the passage of a calculus. I gave immediately chloroform and laudanum, f. ʒ i. ss. aa. In ten minutes he was comparatively easy, but did not sleep soundly until near morning, when he took a nap of an hour, and was able to move with the command by sunrise. He afterward informed me that he passed a gravel larger than a grain of wheat, some time the next day.

In a few cases, in which this combination was not received kindly by the stomach, being thrown back immediately, I have given half a dram of sp. amm. ar., and substituting an equivalent amount of morph. sul. for the tr. opii, gave this with the chloroform, in five minutes, or allowing a longer time, if the symptoms were not to urgent.

I have selected the two cases above from many, in which I have tried this remedy, not because there was anything remarkable about either of them, but because they are typical cases, illustrating the action of a remedy which I consider a valuable one; and though probably inferior to chloral (for I am among those who expect much from this remedy), it may be found a good substitute for that remedy in its absence, and is infinitely cheaper, and therefore to be preferred in practice.—S. A. DUGAN, M. D.—*Nashville Journal of Medicine and Surgery*, July, 1870.

**Treatment of Chorea.**—Prof. Steiner holds that chorea in the majority of cases cures itself, though there are other cases which resist every remedial means. Certain remedies, however, ameliorate and shorten the duration of the disease in the first class of cases. In view of the anemia so frequently present, Prof. Steiner orders iron, either alone or in combination with oxide of zinc, as in the following prescription: Ferri carbon, saccharati, 2 parts; zinci oxid., 1-25 part; sacch. alb., 8 parts; M., ft. pulv. t. d. sumen. The diet should be easily digestible and abundant. If, after the employment of the iron for a fortnight, no improvement occurs, Prof. S. resorts to the preparations of arsenic, by which the disease is often quickly and certainly cured, the general nutrition of the body and the appearance being at the same time much improved. He usually commences with one drop *per diem*, and increases the dose after three or four days to two, three, four and five drops; then, if improvement has resulted, he withdraws the remedy in the same gradual way. Cold water applied hydropathically, is sometimes very serviceable. If the disease owes its origin to rheumatism, the remedies appropriate to that diathesis must be administered. The subcutaneous injection of arsenicum, sulphur, chloroform, and morphia, furnishes no satisfactory results.—*Lancet*.

**Strychnine an Antidote to Chloral.**—It results from close experiments that strychnine, when administered after too powerful a dose of hydrate of chloral, diminishes and removes its

effects, and without producing the noxious action peculiar to it. M. Liebreich therefore proposes to make use of injections of nitrate of strychnine as an antidote in accidents produced by a too energetic action of chloral or of chloroform.—*Lancet*.

**Dangers of Chloral.**—When administered to man in health, in progressive doses of one and a half and two grammes daily, chloral determines (frequently on the second and third days) an exceedingly painful sensation in the epigastrium, acute colic, and nausea, with profuse perspiration.—*Lancet*.

**Transfusion of Blood.**—The following are some practical conclusions that have been formulated by M. Marmonier: 1. The operation of transfusion is not a difficult one to practice, and it requires no special apparatus; 2. The dangers of this operation are less than has been generally thought; 3. It is not necessary to warm the blood before injecting it; 4. One hundred and fifty or two hundred grammes of blood is generally a sufficient quantity; 5. It is not indispensable to defibrinate the blood; 6. Finally, this operation should be but an extreme measure, reserved especially for combating post-hemorrhagic collapse.—*Lancet*.

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Ling Wau, a Celestial charlatan, has taken up his abode in New York, and advertises, not only an imported materia medica, of three hundred "remarkable Chinese medicines," but imported apothecaries to dispense them. In this connection it may be of interest to remark that San Francisco Custom house authorities recently seized an invoice of "remarkable Chinese remedies," consisting of pickled monkeys, dried toads, and such like medicinal articles.—*Medical Gazette*.

St. Louis has taken the initiative in regulating prostitution, a matter which must, sooner or later, be taken cognizance of in all large cities. The "social evil" will always exist, and we can do little toward limiting it; but we can do something toward limiting the spread of syphilis, and it is high time that we should direct our energies to the task.—*Medical Gazette*.

Dr. Henry J. Bigelow, of Boston, has recently presented the Massachusetts General Hospital with a complete set of surgical instruments, made under his direction in Paris and London; and also a permanent fund for their renewal, and has subscribed for a free bed for five years, the whole donation amounting to \$5,000.



*Prof. Gunning S. Bedford, A. M., M. D., of New York.*—This distinguished medical writer and ex-professor of obstetrics, died on Monday morning, September 5th, 1870, at 3½ o'clock, in the 64th year of his age. The sad event was not entirely unexpected by his family, as he had been suffering with paralysis for a long time. His funeral was largely attended at St. Ann's Church, Eighth street, on Wednesday, September 7th. A solemn requiem mass was celebrated by Rev. Father Preston. Archbishop McCloskey, a former fellow-student of the deceased, was present, and in well-chosen words alluded to his many virtues and high medical and oratorical attainments.

Gunning S. Bedford, A. M., M. D., was born in the City of Baltimore, Maryland, in the year 1806. He was the nephew of the distinguished Gunning Bedford of Delaware, who was the Attorney-General and member of the Legislature of Delaware when it first became a State; the latter also being one of the framers and signers of the Constitution of the United States. His uncle was the intimate friend of Washington, by whom he was appointed Chief Justice of Delaware, a position he held till his death in 1812. In 1825, Dr. Bedford graduated at St. Mary's College, Emmetsburg, with high honors. While at college he distinguished himself for his oratorical powers and beautiful diction, becoming renowned as a lecturer and speaker. He was unanimously chosen by his classmates as their "valedictorian."

After graduating, Dr. Bedford's first idea was to study law. With that intention he left Baltimore, with letters for Daniel Webster, intending to study law in that distinguished gentleman's office.

When actually on his way to present his letters to Mr. Webster, he accidentally met an enthusiastic acquaintance who had just commenced the study of medicine. The acquaintance persuaded him to go with him and hear an anatomical lecture by Dr. John D. Godman. They went—the lecturer's subject was an interesting one—the circulation of the blood. Dr. Bedford was charmed and carried away with the eloquence of Prof. Godman, and determined at once to give up all idea of law and commence the study of medicine. Immediately after the lecture, he went up to Dr. Godman and introduced himself, showing him his letter to Mr. Webster, and frankly acknowledging that the eloquence of the lecturer had converted him, and that henceforward he would devote his time and energies to medicine. He accordingly became the pupil of

Dr. Goldman, who in turn became his preceptor and friend, and who did much to advance him in his profession.

In 1829, Dr. Bedford graduated at the Rutgers Medical College. Soon afterward he married, and then visited Europe with the intention of advancing himself in his profession. He remained abroad for two years, during which time he devoted himself to his profession, visiting the hospitals and attending the different lectures and clinics.

Shortly after his return to America, in 1833, he was appointed Professor to the Charleston Medical College, being but 26 years of age.

He was next appointed Professor in the Albany Medical College. After delivering several courses of lectures at the Albany School, he resigned, and determined to visit New York, and make this city the field for his future exertions; and on his arrival here at once commenced a most lucrative and respectable practice.

Dr. Bedford was the first to conceive the idea of founding the University Medical College in this city. He made the suggestion to the late Dr. Valentine Mott, whose valuable aid was of great assistance. The Medical College was soon established, with the following distinguished professors: Paine, Revere, Draper, Patterson, Mott, and Bedford. The school was a great success. Dr. Bedford held the chair of obstetrics until ill-health forced him to resign, which was in 1862. During his connection with the College, he established an obstetrical clinique—the first ever held in this country. It was very successful, and was of great service to those who were too poor to pay a doctor's fee.

Dr. Bedford wrote many articles for the different medical journals, but his two great works are *Diseases of Women and Children*, and the *Principles and Practice of Obstetrics*. The former has gone through ten editions, and the latter five editions. They have been translated into the French and German languages, and have been very generally adopted as the text-books in the medical colleges in this country.

His first attack of paralysis was experienced while in the midst of an active practice, and while in his carriage on his way to visit his patients. This was in 1864. He has experienced four other attacks since that time.

He leaves a wife and several children to mourn his loss. Among the latter are Drs. Frederick Bedford and Henry M. Bedford, and Judge G. S. Bedford.—*Medical Record*.

## Reviews and Notices.

*A Treatise on the Theory and Practice of Obstetrics.*—By WM. H. BYFORD, M. D., Prof. of Obstetrics, etc., in the Chicago Medical College. New York: Wm. Wood & Co., 1870.

Prof. BYFORD is already known to the obstetric part of our profession as an acceptable author. He now adds another very excellent contribution to this department of literature. The treatise before us does not aim to be a voluminous work, but seeks rather to place the whole obstetric art in a condensed shape that will meet the wants and convenience of the general practitioner. The object of the author has been met without entering into any extended discussions of doctrinal points—and so, too, he has not made free references to authorities or works of reference. We have, consequently, presented for us a concise outline of the art of obstetrics in good shape—sufficiently extended for all practical purposes and yet within the limits of about 400 pages. So far as the plan is concerned—or so far as any peculiar views are concerned—there is nothing so marked as to require any criticism. The book is worthy of much commendation, and will be very acceptable to the profession. For sale by Robert Clarke & Co. Price, Cloth \$4 25. Leather \$5 00.

*The Practice of Medicine.*—By THOS. HAWKES TANNER, M. D., F. L. S., member of the Royal College of Physicians, etc. Fifth American from the sixth London edition, enlarged and thoroughly revised. Philadelphia: Lindsay & Blakiston, 1870.

When the first edition of Dr. Tanner's practice was presented to the profession, it was but little more than a manual. But with each successive issue it has steadily grown in bulk until it presents all the character of a mature and comprehensive treatise, as it is. The frequent demand for new editions of this work is sufficient evidence of the favorable regard it holds with the profession, and we feel that the verdict is so complete that little can appropriately be said, beyond this announcement that the American publisher has issued a revised edition. Our readers will certainly find Tanner well and thoroughly up with the newest advances of pathology and therapeutics. The style and appearance is satisfactory. For sale by Robert Clarke & Co. Price \$6.



***Medical Diagnosis with special reference to Practical Medicine.***—A guide to the knowledge and discrimination of diseases. By J. M. DA COSTA, M. D., lecturer on clinical medicine, etc. Illustrated with engravings on wood. Third edition, revised. Philadelphia: J. B. Lippincot & Co., 1870.

We are very sure that we speak no extravagant praise when we pronounce Dr. Da Costa's book on diagnosis superior to any work extant. It took high grounds at once; and we are happy to know that the appreciation of the profession is such as to call for this third edition; with the exception, however, of a few minor revisions, there is no material change since the issue of the last edition. Those who have not a copy should by all means secure one. For sale by Robert Clarke & Co. Price \$6 00.

***The Men who Advertise*** is the title of a ponderous volume just published by Geo. P. Rowell & Co., newspaper advertising agents. It contains over 800 pages, is handsomely executed, and it altogether is a wonderful curiosity of literature. We find a number of biographical sketches of "prominent men who advertise," as Bonner, Howe, D. D. T. Moore, etc., also various hints as to modes of advertising, complete lists of all the newspapers in the country, their circulation, rates of advertising, with much other useful information which business men everywhere will be glad to have at hand for reference.

***Life in Utah:*** or the Mysteries and Crimes of Mormonism. Being an exposé of the secret rites and ceremonies of the Latter Day Saints, with a full and authentic history of polygamy and the Mormon sect from its origin to the present time. By J. H. BEADLE, editor of the *Salt Lake Reporter*, etc. Published by the National Publishing Society.

Such is the somewhat comprehensive title of a handsome volume which we find on our table. The title, indeed, quite fully expresses the claims of the work, unless we should enter fully into a critique of its contents, and this we can not undertake to do, because there is so little in it of special concern with medicine. And yet Mormonism has its terrible medical aspect, and the cultivated physician will desire to read Mr. Beadle's book that he may have a clear idea of the history and present status of this remarkable people.

The conclusion to which the author incidentally gives expression, may be accepted or not, yet the reader can not fail to arrive at very many reliable ideas, and certainly will obtain a fair view of the saints, both their outside appearance and inside work. The work is sold by subscription, but may be obtained through the National Publishing House, Cincinnati.

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E. B. STEVENS, Editor.

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Original Communications.

*Art. I.--Surgical Applications of Carbolic Acid.*

By P. S. CONNER., M. D., Prof. Sur. Anat. Med. Coll., Ohio.

[A paper read before the Ohio State Medical Society, at Cleveland, June 14.]

Respecting the "Surgical Applications of Carbolic Acid," much has been said and written, yet the real value of the agent and its modes of action are by no means well established. They only can do much toward determining the therapeutical importance of an assumed remedy, whose hospital positions enable them to contrast large numbers of cases similarly circumstanced, except in the single item of the use or non-use of such remedial agent. The limited experience that every one must have, who is only in ordinary private practice, renders any expressed opinion, based solely on such experience, an opinion carrying with it but little weight. Particularly must this be true when the solution of the therapeutical problem proposed necessitates an experimental seriatim elimi-

nation of a number of factors, that their non-essential character may be fully established.

Any article of the *Materia Medica* that is used for everything, if it is not wholly inert, must have a definite limited range of therapeutic applicability; and with reference to such article, all experimentation and reasoning should be directed towards the accurate determination of what it can do and in what manner its effects are produced.

Carbolic acid enjoys an "extraordinary reputation," that, as Gubler has well said, "is less due to its proper value, which, however, is very real, than to the simultaneous efforts of certain of its admirers." It is not my purpose to specify in detail the several affections in which it has been employed, for it may safely be declared that there is not a single surgical disease or injury in the treatment of which carbolic acid has not been used; either where there has been no necessity for an operation, or prior to, at the time of, or subsequent to the performance of such operation.

Classifying its varied applications, it has been used for *six* purposes. 1. As a *deodorizer*; 2, as a *local irritant*; 3, as a *caustic*; 4, as a *destroyer of parasites*, animal and vegetable; 5, as a *preventive of inflammation and suppuration*; 6, as a true *antiseptic*, preventing and arresting putrefaction, and protecting from the evil influences of specific miasms.

As a *deodorizer* it is powerless, since it does not effect a decomposition of fetid gases. Repeated experiments have shown that while it may mask their odor, it can not break up the offensive combinations of H. S. C. P. & N., with the single exception that it will somewhat absorb gaseous ammonia. Fortunately, "it so happens that the stinking gases of decomposition are of little or no danger in the atmosphere," and we have agents that will chemically destroy these "comparatively harmless," though extremely unpleasant, products. Indirectly, however, carbolic acid is of great value as a *deodorizer*, since in virtue of its antiseptic power it arrests the putrefactive changes, so that while it can not affect the fetid gases already set free, these are soon so mingled with the atmospheric mass that, no more being thrown off, practical deodorization is effected.

As a *local irritant* it has not been to any great extent employed, its chief merits in this respect consisting in the length of time during which the irritant action is maintained, and the peculiar absorptive influence that seems to be exerted by it upon specific in-



durations. Respecting the first of these, Lemaire states that a single application of the acid is sufficient to keep up a congestion of the skin for from fifteen to twenty days without any inflammation resulting, a less degree of rubefaction and that of less prolonged continuance being produced by the use of a strong alcoholic solution. That it exercises a decided influence upon the rapidity of the removal of syphilitic indurations, we have strong testimony from Neuman, and further investigations may show that a similar influence is exerted by it upon indurations and glandular enlargements of non-specific origin. Care, of course, must be taken that when used as a rubefacient the acid shall be applied for so short a time or in such dilution that it shall not exert a caustic power.

As a *caustic* it is more energetic than the nitrate of silver, less so than nitric acid, bromine and the caustic preparations of mercury, potassa and lime. It coagulates albumen, but such coagulation is only superficial. Employed in full strength it neither oxidizes nor deoxidizes, except that, as we shall see hereafter, under certain circumstances, a deoxidizing influence upon the sulphur compounds may be exerted by it. It has some excellencies as a caustic, since it is easily graduated in strength, its effect is limited to the area to which it has been applied, and the resulting "eschars" are small and unaccompanied by true suppuration."

At the "International Medical Congress," held at Florence in September last, attention was called by Paventa, to the beneficial effects resulting from its application to carcinomatous growths.

In the *treatment of parasitic skin diseases*, the acid has been largely employed and the general testimony is in its favor as a readily applied and powerful parasiticide, having no greater and in some affections less value than other and longer employed agents exerting a destructive influence upon the parasite, or changing for the better the character of the nidus in which the vegetable disease-producing organisms are developed.

The fifth and sixth purposes for which the acid has been employed, i. e., to repeat, for the *prevention of inflammation and suppuration*, and as an *antiseptic*, are by far the most important, and if both or either is accomplished, a "a very real" value of the agent is established. Into the production of an inflammation of any given part, three factors enter, the nerves of the part, its blood vessels, and the reciprocal influence of the tissues without, and the nutrient fluid within the vessels. The nerves concerned belong to

both the vaso-motor and the cerebro-spinal systems. It has been shown that when the vaso-motor nerves have been paralyzed, there results, "dilatation of the blood vessels, afflux of blood and increase of vital properties;" while excitation or stimulation of such nerves causes "contraction of the vessels, diminution of blood, and decrease of vital properties." Any agent then that being applied to a part, excites the vaso-motor nerves, or causes mechanical contraction of the blood vessels, or lessens or arrests the molecular motions in the tissues of the part, and their supplied pabulum, must so far act as anti-inflammatory. It has been repeatedly demonstrated, that upon the application of carbolic acid, the vaso-motor nerves are stimulated, the calibre of the vessels diminished (directly by the cauterization of their walls, indirectly through nervous influence), and intra and extra vascular molecular motions lessened or altogether arrested. If the primary stimulation produced by the acid can be so graduated as that there shall not follow a morbid paralysis of the vaso-motor nerves, there can be no question but that this agent may be so employed as not to *cause* inflammation. But will it act *positively* as well as *negatively*, will it *prevent* inflammation or *arrest* it if already in progress? In what way can inflammation arise or continue in a part supplied with a less than normal amount of blood, and where there is to a certain extent, a prevention of those molecular movements by which the nutrition of the part is secured? If carbolic acid can put a part in this condition without too great reaction following, it must have the power to prevent and to arrest the inflammatory process.

But what is of much more practical importance, can an external wound by the use of the acid be made to heal by granulation without suppuration? Undoubtedly such result has been secured under the carbolic acid treatment, and that too in wounds of a character such that ordinarily abundant pus-formation occurs. If this result be due to the employment of the acid and not to outside hygienic influences and special care taken in cleansing the wound and excluding all irritating substances, how has the acid acted? "Suppuration is always due to excessive stimulation." If by over excitement of the nerves, there has been produced a paralysis of the vaso-motor distribution of the part, any resulting suppuration is inflammatory in its character. The pus-corpuscles (considering the three now most prominent theories of their nature and origin), are either (1) directly derived from pre-existing connective tissue or epithelium corpuscles, or (2) result from the growth or aggre-

gation of germinal matter developed from any tissue or granular matter spontaneously appearing in an "oleo-albuminous" fluid, or (3) are nothing more nor less than migrated white blood corpuscles. If they are but the too rapidly formed and imperfectly developed cells produced by the proliferation of connective tissue corpuscles, carbolic acid in preventing their formation must act by lessening excessive stimulation. This it may do through its influence upon the nerves of the part, causing a diminution of the amount of blood supplied and consequently the rapidity of its nutritive changes, or by the superficial coagulation it produces, which in a degree excluding the air renders the wound somewhat akin to a subcutaneous one. This connective-tissue theory, not long since so generally accepted, is now adopted by but comparatively few pathologists. In studying the phenomena of many recent experiments very careful observers have noticed much the same condition of part, as has lately been recorded by Hayem, who "in an inflamed mesentery found the epithelial layers and the conjunctive tissues almost perfect, the epithelial covering remaining inactive during the process of inflammation and being penetrated by the leucocytes."

Upon the molecular growth or aggregation theory, pus originates in granular matter spontaneously appearing in an "oleo-albuminous fluid," or is developed from germinal matter already present in and constituting the essential vital element of the nutrient fluids and the various tissues; such granular or germinal matter as the result of abnormal stimulation receiving too much pabulum, and being too rapidly developed to contribute to healthy growth and repair. The acceptors of this theory must explain the favorable action of the acid, either by the diminution it causes in the amount of nutritive fluid conveyed to the part, or by its power of coagulating albumen and thereby arresting all molecular motions. The latter seems to be the view adopted by M. Onimus, whose experiments were made with the "clear serum from a blister placed in a bag of gold-beaters skin, and put below the skin of a rabbit so as to be exposed to warmth and endosmotic currents." He found that even after the serum had been filtered, "bodies like pus-corpuscles or the colorless cells of the blood (i. e. leucocytes)" arose "spontaneously by molecular deposition" so long as coagulation of fibrin(?) did not occur, and declares that "all substances which produce coagulation, such as alcohol, corrosive sublimate



and iodine (to which we may add carbolic acid), prevent such formations."

If we accept the remaining one of the three before mentioned theories of pus-formation, viz: that the pus corpuscles are but migrated white blood-cells, which have escaped through the stomata of the vessel walls, we can readily enough understand how carbolic acid may prevent suppuration. By its stimulation of vaso-motor nerves, and its direct caustic action, it lessens the calibre of the vessels, thereby contracting the stomata, and diminishes the amount of blood circulating in the vessels and necessarily the number of white corpuscles liable to migrate; and in virtue of its power to arrest molecular and corpuscular motion, it must check those *amœboid* movements of the white blood-cells by means of which they effect their passage from within to without the vessels. The truth of this theory at least so far as indicating one origin of pus-cells, is being more and more established as experiments are multiplied.

But if on any one of these theories we can found an explanation of the anti-suppurative influence of the acid, how does it happen that suppuration is prevented in comparatively but few cases, and those to a great extent occurring in the practice of a few individuals? For the simple reason, say these individuals, that in the vast majority of cases the acid is not properly applied. If applied, say they, directly to the wound and in strong solution it will, in very many cases, so abnormally and directly stimulate the injured tissues that there will be induced what Lister has styled the "antiseptic suppuration," "non-inflammatory in its character, affecting only the parts primarily excited, diminishing in amount as the serous discharges dilute the acid, and soon ceasing altogether not to be re-established if proper treatment is followed." The acid dressings must, as far as possible, exclude the air, for air is a stimulant of wounds, and if pus is developed putrefactive changes will likely be produced in it. If "antiseptic suppuration" ensues, exit must be given to the pus, and the wound thoroughly cleansed under the protection of the acid; the surrounding atmosphere must be kept constantly charged with the acid vapor that putrefaction may be prevented. Adopting these precautions, viz: keeping the wound clean, shielding it from direct contact with the acid, protecting it as perfectly as may be from the air, and disinfecting what air does reach it, then, say the strong advocates of the carbolic acid treatment, the wound may be expected to and will unite without suppuration.

But if the wound be treated in precisely the same way, except that no carbolic acid is used, will not a similar good result very many times be secured? Has not such a result been obtained when the catacleistic method has been adopted, the wound readily cicatrizing without suppuration beneath its artificial crust. An extended series of parallel experiments with and without the acid can alone determine how much real beneficial influence is exerted by it. The consideration of theories may enable one to understand how such influence, if it exists, arises, but this by no means proves that such influence really is exerted.

Even more important than its use as an anti-inflammatory and anti-suppurative agent is its employment for the *prevention and arrestation of putrefaction*, and the *destruction of animal miasms*. Every one knows the very grave character of the diseases developed in consequence of putrefactive changes, and those dependent upon the reception of contagious elements from without; and how great the mortality is in surgical practice from *pyæmia*, *hospital gangrene*, *erysipelas*, and *exhaustion consequent upon long continued putrefactive suppuration*.

Putrefaction may be explained upon either of two theories. The one maintains that dead nitrogenous matter being exposed to the action of air or oxygen in the presence of little moisture, undergoes a chemical change, being reduced from its original complex constitution to a more simple one. Such decomposition having once commenced is propagated from molecule to molecule until the entire dead mass is affected, and this mass, acting as a ferment, excites putrefactive molecular motions in the living tissues with which it is in contact. The other theory declares that it is not the air nor oxygen that sets up the putrefactive process, but the action of certain organisms, the germs of which are, under ordinary circumstances, always floating in the atmosphere. The earliest developed of these organisms have as their special office, it would seem, the taking up of oxygen from the substance that is to undergo putrefaction. This office having been performed and all the oxygen removed, these monads and bacteria die, and if vibrio germs be present they are in turn developed and putrefaction takes place. Without the vibrios putrefaction can not occur, and vibrios can live only in the absence of oxygen, hence the necessity for the precedent removal of this element by the monads and bacteria.

Which of these two theories, the chemical one of Liebig or the germ theory of Pasteur, is the true one, is a question at present

*sub judice.* Some very eminent investigators have, as the result of their experiments, found that putrefaction does occur in fluids subjected to the influence of only heated and filtered air. Pasteur's essential putrefaction-producing germs, the *monads*, *bacteria* and *vibrios* are, some maintain, but varieties of a single organism, not received from without but originating where found, and formed by a peculiar aggregation of spontaneously developed molecules. In the opinion of others, again, the three organisms referred to, while not the cause of putrefaction are yet powerful in continuing it, since by their vital actions they increase the over stimulation of the part in which they are found.

Upon the chemical theory the antiseptic action of carbolic acid must be explained by its arrestation of molecular motions through its coagulation of albumen, for it is well known that when this change in albumen has taken place and the expressed water been removed by ordinary evaporation or heat, putrefaction is long delayed.

Acceptance of Pasteur's theory has certainly had more to do with the introduction and varied applications of carbolic acid in surgical practice, than all other causes combined. No fact with reference to the properties of the acid is better established than that it is destructive to all low forms of organic life, so much so that it has been proposed as the "test proper for distinguishing vital from purely physical phenomena." If, then, putrefaction is excited solely by the presence, multiplication and development of organic germs, carbolic acid is *the* anti-putrescent *par excellence*. Neither monads, bacteria, nor vibrios can live in its atmosphere. All that is required to prevent putrefaction, either of a part deprived of its vitality or of a discharge from an open wound, is, it is claimed, to let no air reach either part or wound that has not been so subjected to the influence of the acid as to insure the destruction of all germs contained. Under the protection of this antiseptic, the cold abscess may be safely opened, and its speedy closure secured, the compound fracture treated as successfully and with as little danger of purulent infection as the simple fracture, the dead tissue, soft or hard, restrained from undergoing decomposition, made to contribute to the nutrition of the living tissues adjacent and the system at large. All this may be accomplished by the proper use of carbolic acid, if it can be shown that putrefaction is not a change spontaneously developed, nor due to the action of a



ferment, but is the result only of the admission of organic germs from without.

Admitting, for the moment, the truth of all that is claimed by the theory of Pasteur and for the carbolic acid treatment, the same question may be asked as before, how does it happen that the stated good results are obtained in comparatively few cases, and those, for the most part, in the practice of but a few individuals? The same answer has been given as before, because the acid is not properly used. The wound must very early be subjected to treatment, and the acid must be applied to every portion of it. If any of the organic germs are left undestroyed, the result will be as unfavorable, or nearly as much so, as if the acid had been omitted altogether. Not a particle of undisinfected air must be suffered to reach the wound at any time before its complete closure. To make sure of all the good that the acid is capable of accomplishing (say its strongest supporters,) its use must be faithful, thorough and unremitting. It is certain that those who have had the most confidence in the acid, and have the most thoroughly used it, have had the largest measure of success in their treatment by it of grave surgical diseases and injuries.

The deadly action of the acid on living organisms and its power to restrain molecular motions have, since its earliest use, attracted attention to its employment for the destruction of those contagious elements, whatever they may be, that as the *causæ causantes* of erysipelas and hospital gangrene have at times proved so destructive of part and life, and so greatly increased the risk and mortality of accidents and operations. The spread of either of these diseases depends, it is highly probable, upon some peculiar contagium that thrown off from one patient is transmitted to another; and the only rational idea that can at present be entertained of the nature and origin of such contagium is, that it is a living something, organism, cell, or germinal matter, or is a specific condition of fermentation set up in and by the emanations from patients laboring under these diseases. So, too, the injurious effects of overcrowding and defective ventilation are in a great degree consequent upon those animal miasms that are constantly being thrown off from the healthy, and still more the diseased body. Carbolic acid is highly volatile, is soluble in water, and can, therefore, be readily conveyed wherever water-vapor can penetrate. In the proportion of 1 part to 500 or 1,000 of water it arrests "putrid fermentation," and in one per cent. solution destroys small animals. Such an amount of

its vapor in the air as was not in the least harmful to the cattle breathing it, seemed to prevent the contagious elements of the Rhinderpest from exerting their injurious influence.

Only extended investigations can determine whether or not the virus or ferments of human infectious maladies can be safely destroyed by the liberation of the acid vapor in a ward occupied by the sick, or as Angus Smith has put it, "which will bear most, the disease or the diseased." If it proves to be the diseased and those whom it is desired to protect from the influence of the germs or ferments, carbolic acid will, on this ground alone, be an addition to the *Materia Medica* of immense value; and by its aid, some very vexatious problems with reference to hospital construction and management, may be solved to the satisfaction of the State, the profession and the sick.

Respecting the use of the acid for the disinfection of human excreta, but little need be said. Having no true deodorizing power it must be applied simply as an antiseptic and destroyer of any disease-producing germs present. These purposes it accomplishes admirably, and, with perhaps the exception of iodine, as suggested by Barker, better than any other agent. When, however, this disinfection is made in the presence of much water, the acid is inferior in value to the metallic salts, and it has been observed, that an amount of sulphureted hydrogen is developed, indicating, perhaps, "oxidation at the expense of the sulphur compounds." The disinfection continuing only so long as the acid is actually present, the volatility of the acid renders necessary a speedy removal of the excreta acted upon.

To recapitulate, as a *deodorizer* proper, carbolic acid is valueless. As a *rubefacient* and *caustic* it will accomplish the objects desired, but is not likely to take the place of the well known agents ordinarily employed. As a *parasiticide* it has decided power, but will not, probably, displace in the confidence of the profession the various preparations of sulphur and mercury. As a *preventive of inflammation*, not dependent upon stimulation by the animal salts developed during putrefaction, its real value can not, at present, be declared, but must be determined by time and experience. As an *anti-suppurative* agent, while it may excite suppuration by its own stimulant power, it will prevent that formation of pus which is due to the putrefactive decomposition. As an *antiseptic*, hindering the development of diseases directly or indirectly dependent upon pus changes, it is of great value, its protective influence being directly

proportionate to the care and skill with which it is employed. As a *destroyer of specific viruses and ferments* it may be used with great confidence, and will, probably, prove to be possessed of much of the power in this respect that has been claimed for it. As a *sick-room disinfectant* its action is certain and powerful, and it can be easily and safely employed.

Three objections exist against its use upon and about the subjects of surgical treatment, viz: the odor of the acid, its unfavorable influence upon granulations, and the danger to life in its employment. To many persons the odor is intensely disagreeable, and it is doubtful if this odor can be removed by any combination that will not impair the therapeutical value of the acid.

In many cases, an unhealthy condition of the granulations has resulted from the use of the acid, and there has been manifested an unusual liability to spontaneous hemorrhages, so much so as to occasionally seriously compromise life. Not unfrequently cicatrization is much delayed, and in some cases it has been found necessary to abandon the use of the acid, in order that healing might take place.

The liability to the production of serious and even fatal constitutional disturbances should never be forgotten. According to Bardeleben more or less constitutional disturbance may be expected in about one-tenth of the cases in which carbolic acid is to any considerable extent employed; a varying degree of *spanæmia* being most commonly induced. The true toxic action of the acid, however, as has both experimentally and clinically been shown, is upon the nervous system. There is produced "paralysis upon the side to which the application has been made, dilatation of the pupils, dilatation of the blood vessels of the medulla oblongata and the spinal cord, great diminution or entire abolition of common sensibility, convulsions and death." Vomiting is very frequently induced, and after amputations, when the stump has been washed with the acid, this vomiting has been so "persistent and uncontrollable" in its character, as "to very materially contribute to the production of speedy death."

These constitutional symptoms not only follow absorption of the acid, and its transmission with the blood to the nerve centers, but, as has been proven by Neuman, the nerves themselves are a medium, if not *the great* medium by which the influence of the acid is conveyed to the nerve centers.

Of the organs through which the acid is eliminated, the kidneys



are those most injuriously affected. Rapidly fatal nephritis has been developed after the application of the acid to a large ulcerated surface; and the very constantly observed "black urine" is due, probably, to the destruction of the blood corpuscles, hemorrhage having resulted from local irritation as well as the general spanæmic condition.

It is important to remember that it is the *superficial extent* rather than the *depth* of a wound that determines the danger of the use of the acid; hence, it should not be employed to produce rubefaction of a large area, nor in cases of extensive destruction of the skin from burns or other injuries.

The characteristic symptoms of poisoning having manifested themselves, the use of the acid must be at once suspended (since it is very rapidly absorbed, even through the unbroken skin) and diluents freely administered. With the elimination of the acid, in the milder cases, the unfavorable symptoms will of themselves disappear.

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#### *Art. II.--Case of Chorea.*

By T. CURTIS SMITH, M. D., Middleport, O.

Miss C. æt. 18. Fair complexion, nervous temperament. Has been afflicted with chorea since January, 1869, during which time she has been constantly under treatment, either from irregular or regular practitioners, but without avail. Saw her August 9, 1870. Found the pupils dilated, tongue with thick white fur, countenance cheerful, not emaciated, but pale and rather anemic, complete inability to retain any solid food—lives entirely on butter-milk and molasses, solid food always rejected—bowels regular, considerable leucorrhea, catamenia regular, respiration twenty-one, pulse ninety, soft and weak. The motions consisted in a continual jerking of the left angle of the mouth and *alæ nasi*, right forearm and hand and both lower extremities, the latter keeping a continual movement from right to left and *vice versa*, the heel of the left foot being on the toes of the right foot. If the feet were separated from this position, there was very rapid adduction and abduction. All these motions would cease as soon as she would hold her breath and during sleep, which was generally good. The urine natural in quantity and appearance. There is great

tenderness over the entire surface. Treatment consisted in a strong salt bath, used every day with much friction, and the mind diverted as much as possible from her afflictions. Gave internally the following:

R.—Tr. Actea Racemosa.

Tr. Hyoseyamus.

Syr. Simple ãã ʒ ii.

M. S. Tablespoonful every six hours; also

R.—Ferri Pulvis ʒ iii.

Zinci Sulph. ʒ iss.

Quinia Sulph. ʒ i.

M. ft. pil XX. S. One three times a day.

On the second day of treatment the motions were perceptibly less rapid. Treatment continued. On the fourth day the motions entirely ceased. Before this she had not been able to sit up or stand for twenty months. She now sat up, and in a few hours she could stand alone, and on the fifth day after treatment began she walked a square and a half without help. She has continued to improve in strength and ability to control all muscular movements ever since. Is now quite well. The recovery may have been a mere coincidence, but I give the treatment that others may have the benefit of it if they see fit to try it.

### *Art. III.--Brain Tumors and C. G. Comegys, M. D.*

By ROBERTS BARTHOLOW, M. D.

In the *Medical and Surgical Reporter*\* for July 9th and 16th, Dr. C. G. Comegys published a paper under the following title:

CINCINNATI HOSPITAL, MAY, 1870.

Medical Clinic of C. G. Comegys, M. D., etc.

(Reported by J. W. Hudlock, M. D.)

#### BRAIN TUMORS.

This paper had been read at the Academy of Medicine, and was before that body for discussion and criticism. I published a critical examination of it in the *Cincinnati Medical Repertory*, for September and October, 1870. In the last number (October) of the

LANCET AND OBSERVER, Dr. Comegys attempts a reply to my "invective," as he is pleased to call my criticism in the *Repertory*. In this reply, notwithstanding he professes to "feel in an excellent humor in regard to the Professor's criticism," he manifests a degree of ill-temper, singularly at variance with his professions of good humor, and out of place in a scientific discussion. He is fertile in epithets, but rather barren in arguments. He introduces the manners of a ward politician, which he probably finds effective in his electioneering contests for the common council, but he must be told that scientific questions differ from political ones in this, that they can not be decided by calling hard names. Instead of replying to my arguments, he does what is much easier—he abuses me.

To divert attention from his published paper, he introduces some apocryphal cases in which I am supposed to have committed errors of diagnosis, but these cases, whether correctly reported or not, have not been published. I did not lecture on them, nor write, nor print a paper about them; consequently, they are not before the profession for criticism. Moreover, the errors of diagnosis, which a physician commits in the course of his private practice, and which he may rectify on more mature examination, are very different from those made in a hospital, adhered to in public lectures and deliberately confirmed by publication to the medical profession. The former are not legitimate subjects for public criticism; the latter, it is the duty of every one to expose.

The case of supposed ovarian disease, which he produces against me, it is true, was in St. John's Hospital some years ago, but beside this fact, there is a little else in Dr. Comegys' narrative that conforms to my knowledge of the case. The patient had been married twelve years, without having conceived. A tumor began to develop on the left side, which three eminent physicians in Washington and Baltimore diagnosticated as ovarian disease, and an operation was suggested. Her husband being engaged in business in Cincinnati, she was recommended to my care, by one of the physicians of Baltimore, who had been consulted in the case. Soon after her arrival here, as I had had no clinical experience with ovarian disease, I requested and had the advice of that eminent gynecologist, Prof. Parvin, who saw her repeatedly with me. Prof. Blackman also saw her with Dr. Parvin and myself, and the result of all the deliberation was, that the probabilities



were in favor of pregnancy—a view confirmed finally by the delivery of twins.

The other case to which Dr. Comegys refers—that of the child examined by me with “stethoscope, thermometer, aesthesiometer, sphygmograph, and some other ‘instruments of precision,’” and which I diagnosticated as “pericarditis, pleuritis, most likely pneumonitis with hydropericardium, and hydrothorax sufficient to displace the heart,” and which proved to be a case of “pleurodynia,” is as new to me as to the readers of the journal.

I do not intend to be diverted from the real points at issue, by the gossip of garrulous old women, and of unreliable old doctors, for idle gossip, except in the view of such pseudo-scientists as Dr. Comegys, can not take the place of scientific facts. If I were so inclined, I could submit to the readers of the journal, some entertaining material of this kind, contributed by Dr. Comegys to common rumor, but I prefer to confine my criticisms to the published record—to the deliberate and formal expression of Dr. Comegys’ opinions, as they appear in the public press. I think it will be agreed that in doing so, I am not exceeding my privilege. Moreover, as Dr. Comegys “feels in excellent humor in regard to the Professor’s criticism,” I may be considered as having his sanction in contributing some additional satisfaction to his large stock of contentment.

Before Dr. Comegys’ paper on “Tumors of the Brain,” appeared, I had published the substance of some lectures on the morbid anatomy of two of these cases. I think it will not be considered very extraordinary that I exercised a privilege permitted to all members of a hospital staff, to publish their lectures if they see fit so to do. A case which Dr. Comegys has in the wards of the hospital, upon which he may or may not lecture, or, in regard to which he may or may not write a paper, ceases to be his private and personal property when it goes into the dead-house for investigation by the pathologist. The morbid specimens from such a case, at that time, and subsequently, when deposited in the museum, is material to be used in illustration of the pathologist’s lectures. The clinical history of such case as recorded in the hospital case-book, so far as may be necessary for the purposes of instruction, may be used by the pathologist. Especially, if the case had been an obscure one, or errors in its diagnosis had been committed, should the cause of the obscurity, and the source and nature of the errors of diagnosis be fully explained and set forth

in the lecture on the morbid anatomy. It is true, in my lectures, and in my published observations (see transactions of the Ohio State Medical Society, 1869), I avoided reference to Dr. Comegys' mistakes, because aware that his exceeding vanity can not brook the least reflection on his all-sufficient wisdom. That I referred to the hospital case-book for information, is no novel proceeding, for any one at all familiar with medical literature, will recall papers on pathological questions in illustration of which hospital case-books have been thoroughly overhauled. As a notable example of this I may mention Ogle's papers on intra-cranial growths in the British and Foreign Medico-Chirurgical Review for 1865.

Dr. Comegys takes the extraordinary position that a case once in his hands, is his case for all time, and possibly for eternity. The singular nature of this claim is well shown in his three cases of brain tumor. Two of these were but a short time in his hands. One was treated by Dr. White, was presented by him to the clinical class, and he published the lecture which he delivered on this occasion. One of the cases died in Dr. Murphy's wards. The *post mortem* examinations of two of these cases were made by Dr. Carson, who presented the specimens, with some remarks, at the Academy of Medicine. As I was at this time delivering the course on morbid anatomy at the hospital, the specimens were referred to me, and, as was my duty, I entered into full details in regard to the nature of the lesions, their position, and the relation they bore to the symptoms observed during life. These lectures, or at least the substance of them, I ventured to publish without Dr. Comegys' consent, and he, therefore, considers me as having "forfeited all medical honor," because the cases were his! I think under such circumstances, the reader will pardon the offensiveness of the remark made in the *Repertory*, that Dr. Comegys betrays in the assumption of this position an "overweening vanity and selfishness." That the "medical staff of the hospital have unanimously denounced his course,"—of which there has hitherto appeared no evidence—even if true, does not strengthen Dr. Comegys' case, and that "the trustees have removed him from this position," [*i. e.* of pathologist] only shows how personal and family associations may be used to dispose of an antagonist. In a communication to the *Enquirer* of the 14th ult., Dr. Comegys admitted that he "appealed to the board," to abridge my position in the hospital, and for presuming to criticise his paper on "brain tumors," he procured my dismissal from the staff.

The opinions of the hospital staff, and the action of the trustees, do not appear to me to affect the errors, physiological, pathological and therapeutical, which Dr. Comegys has published to the medical profession in his paper on "Tumors of the Brain." Hence, I pass from the consideration of these irrelevant matters to the questions really at issue.

Dr. Comegys reported three cases of brain tumor. In order to render my remarks clear to the reader, I condense from his paper, the material points of each case, preliminary to my criticism upon it:

CASE 1. John Murphy. Left eye projects with some divergent strabismus. Has double vision. The lid drops slightly. Can not open the eye wide. When he walks he stoops and staggers like a drunken man.

*Post mortem.* A tumor found at the base of the brain, springing from posterior clinoid process of sphenoid bone, and the internal extremity of the petrous portion of the temporal bone involving the following parts, viz: The left 3d, 4th, 5th and 6th nerves, impinging upon the left *crus cerebri* and left lateral portion of the *pons*.

In the original record of this case (hospital medical record book for 1869, p. 302), Dr. Comegys' diagnosis is stated to be "degeneration of the arteries of the brain." In his attempt to evade this, he involves himself in a contradiction. In order to excuse himself, he ungenerously blames the error on the resident physician, his clinical assistant, who is so ignorant as to write down for tumor or other lesion involving the third nerve, the diagnosis of "degeneration of the arteries." Although he thus blames the *interne*, in his reply to my criticism in the *Repertory* he is unguarded enough to say—"when a case is placed in my wards, I am responsible for the diagnosis and treatment thenceforth." In one place, the resident physician's ignorance is responsible for the diagnosis; in another, Dr. Comegys, himself, is responsible. When I come to the subject of Dr. Comegys' treatment of these cases, I will demonstrate that his therapeutical notions were in accord with his diagnosis of "degeneration of the arteries." When the tumor was discovered, *post mortem*, he revised the diagnosis to bring it more nearly into conformity with the disease actually found. It would have been quite too glaring an instance of *post mortem* diagnosis, to have exactly stated the situation of the disease, so he excluded the *crura* of the cerebral lobes and fixed the



lesion "on the left side of the base of the brain involving the third nerve." This position of the disease would agree with the absurd idea he had conceived, that the disorder of locomotion was due to the double vision. Although he had the advantage of the exact information afforded by the autopsy, he proves by his observations on the diagnosis, that he is incapable of a correct interpretation of the relation which the symptoms during life bore to the lesions found after death.

Murphy had a "reeling gait;" "he stooped and staggered in walking"—a very characteristic symptom. Dr. Comegys attributed this symptom "mainly to the double vision, and not to any *locomotor ataxia*," for the extraordinary reason that *he* had observed that patients with double vision "can walk straight if the weak eye be bandaged." In my criticism I showed that he had entirely overlooked the defect of coördination so manifest in this patient. The power to combine groups of muscles to execute any given movement, is wholly independent of vision. In the ataxic—*i. e.* those who have lost the coördinating faculty—vision is necessary to guide the feet, because from loss of tactile and muscular sense, they are unconscious of the position of their feet; hence, when they close their eyes, they fall. Now, Dr. Comegys, with a singular misconception of the nature of these phenomena, alludes to my ataxic patient, Kelch, who needed his eyes to guide his feet, as a case parallel to that of Murphy—who, he affirms, could walk straight, if his weak eye were bandaged!!

This style of argument is eminently Comegysian, if not logical. As I do not, however, propose to combat Dr. Comegys' opinions, by advancing my own, I will quote the very highest authorities, to prove that he is utterly ignorant of the physiological points involved in this case of Murphy.

Ladame,<sup>1</sup> the author of the best special treatise now extant on tumors of the brain, asserts that disorders of motility existed in five-sixths of the cases collected and observed by him. Among the symptoms dependent on irritation he mentions "*ataxia*, choreic, and rotary movements." The same author,<sup>2</sup> in an article on tumors of the pons Varolii (the part of the brain involved in the case of John Murphy) refers to the same ataxic disorders in these cases. He, also, distinctly sets forth the fact of the coincident occurrence of visual disorders in the cases of tumor involving the pons—20 times in 26 cases—and he enumerates among them *double vision*, *ptosis*, and *strabismus*.

Perrenout<sup>3</sup> says that motility is most often affected in the case of tumor compressing the pons, and that the side, on which the lesion exists, is indicated by the disorder of the special senses. Topinard<sup>4</sup> gives three cases of syphiloma of the brain at the base (same as Comegys' John Murphy), in two of which there existed double vision, in one ptosis, and in all a reeling or staggering gait (ataxia), but he ascribes this disorder of motility not to the visual derangements but to the affection of the pons. Indeed, he points out the fact that the ataxia or disorders of coördination are increased by closing the eyes. According to Comegys, by closing the weak eye, cases of this kind ought to walk straight.

Hasse<sup>5</sup> refers to strabismus, ptosis, and a reeling gait (*schwankender Gang*) as symptoms of tumor.

Reynold<sup>6</sup> gives the same visual symptoms as indicative of syphiloma of the base of the brain. "Implication of third, and especially of the sixth nerve is frequently observed, so that the patients exhibit ptosis, dilated pupil and divergent strabismus."

Niemeyer<sup>7</sup> says "In tumor of one *crus cerebri*, the paralysis of the opposite side of the body is almost always accompanied by paralysis of the oculo-motor of the same side."

It is needless to quote authorities further on this point. All agree that tumors involving the third nerve, and accompanied by strabismus, double vision and ptosis, usually cause disorders of motility by impinging on the *crus cerebri* and pons. But Comegys excluded the *crura cerebri* in his diagnosis of the Murphy case, and referred the disorders of motility—the reeling gait—to the derangement of vision. Notwithstanding it is Comegys who says so, we are compelled, in consequence of the unanimity of the authorities on the other side, to differ with him. The manner, in which our Cincinnati clinician argues his side of the question against the rest of the world, is a remarkable exhibition of physiological and clinical prestidigitation. Comegys quotes "rope walking as a proof that the feet are guided by the eye." If this were true, it would not at all affect the question at issue; but it is not true, for the rope-walker keeps his eyes fixed on the rope, or on some stationary object in a line with it, and not on his feet. With singular inadvertence he quotes against himself the fact that the somnambulist walks by the muscular sense alone, and not by his eyes; but he adds that "serious accidents occur for want of vision." Is it not in consequence of the fact that the eyes are not used, that in this "strange state," walking by the muscular sense

alone, accidents occur so rarely? Still quoting against himself, he refers to the fact that the blind man is guided by the muscular sense, and does not "stoop and stagger in walking." It is evident, then, that in Murphy's case the reeling gait was due to ataxia, and not to double vision, and closing the eyes would, so far from benefiting his locomotion, have increased his embarrassment.

The extraordinary misconceptions which led Dr. Comegys into the errors I have just exposed, are also exhibited in another important point in connection with the diagnosis of intra-cranial neoplasia. "The absence of *paralysis*," he remarks, "led me to exclude the cerebral lobes and their crura." In another place, he also, says: "Neither, because a tumor is closely identified with a nervous cord, are we to assume that anæsthesia or loss of motion existed in the parts to which the nerve was distributed." These observations indicate that Dr. Comegys is entirely unacquainted with the difference in effect caused by *irritation* of a nerve or a bundle of nerve fibres, and such impairment of structure as interrupts the transmission of impressions to and from the brain. Let me give him some information on this point. Ladame<sup>1</sup> divides the symptoms produced by brain tumors into two classes: 1. Those due to *irritation*; 2. those due to destruction of function of some part of the brain. In the first class we have ataxia, convulsions, choreic and rotatory movements, or, as, Hasse has it, *schwankender Gang*—a reeling gait; in the second, the various forms of paralysis. Romberg<sup>2</sup> lays especial stress upon the clinical importance of those symptoms produced by irritation as distinct from those due to destruction of function. Indeed, every writer on this subject makes this distinction, except Comegys. If these able and distinguished authorities are anything worth, as opposed to Comegys, we must conclude that he did not understand what he was talking about, when he uttered that imposing nonsense in regard to the double vision causing a "reeling gait."

CASE 2. John Rinke. Hemiplegia on right side, except the face. Sensation same on both sides. Right forearm swelled, and had an erysipelatous look; whole arm œdematous, and also, right leg. No affection of eye or of vision. Face had a blank expression; intellect dull; loss of speech; could not comprehend printed language.

*Post mortem.* Cysts were found in the following situations: in left side of posterior lobe of right hemisphere; one on the opposite side in nearly the same situation; a third in the middle



lobe in one of the sulci; a fourth cyst situated in the right optic thalamus, projecting into the lateral ventricle; a fifth cyst on the floor of the fourth ventricle. To these details, taken from Dr. Comegys' own statement, I may add, that these cysts—barren hydatids—were found in the usual situation of these bodies, *i. e.* imbedded in the gray matter of the hemispheres, and in the ventricles. That lying on the floor of the fourth ventricle, was of the same size as the others. It was discovered by me, while making a dissection during the course of my lecture on the specimen.

Dr. Comegys remarks that Dr. Carson, after a more careful examination, determined that these were not hydatids. He should not commit Dr. Carson to an erroneous opinion without authority. In my criticism in the *Repertory*, I said they were *barren* cysticerici, or hydatids; in his reply, Dr. Comegys reiterates his statement that "Dr. Carson, after a microscopic examination, found none existing." If Dr. Comegys will read Bastian's<sup>6</sup> account of cysts in the brain, or Rokitsansky<sup>9</sup> on this subject, he will receive a degree of illumination which will prevent him falling into such an error again.

The reader will find, on referring to the number of this journal, for January, 1870, the report of a clinical lecture on this case, by Dr. John F. White, who had preceded Dr. Comegys in the charge of it. Dr. White made a diagnosis of hemiplegia due to hemorrhage in left corpus striatum. He called especial attention to the facial paralysis, which, being on the same side as the hemiplegia, he considered, *mirabile dictu!* an abnormality. Dr. Comegys, in his account, *excepts the face*, but he fixed the position of the lesion in the same situation. When the cysts were discovered *post mortem*, he admitted that he was "greatly at fault in diagnosis;" but in his reply to my criticism on this point, he tries to escape the consequences of his own admission, by referring the hemiplegia to the faintest possible evidence of cicatrix in the left *optic thalamus*. He justifies himself in this extraordinary fashion:

"The error in diagnosis, which I confessed, was in supposing from the extent of the right hemiplegia and the aphasia, that the left *corpus striatum* and anterior convolutions were involved in organic lesions; but their lesion was functional, and reflected, doubtless, from the organic posterior lesion of the same side!!"

In all this, the reader will perceive that he completely ignores the cyst which occupied the floor of the fourth ventricle. In my

lecture, I pointed out this cyst *in situ*, imbedded directly on the fibers of origin of the right facial. It made a deep indentation at this point, for unlike the cyst which lay under the ependyma of the right ventricle, there is here no space for the growth of such a body, as the cerebellum directly overlies it. In enlarging, then, this hydatid directly involved the left lateral motor and sensory fibers, above the point of decussation of the motor fibers, and also the fibers of origin of the right facial. Any one at all familiar with such questions, will see that the result of sufficient pressure, at this point, would be *paralysis* of the right side. Notwithstanding this very obvious fact, Dr. Comegys says "the positive hemiplegia of the right side can only be explained by the structural lesion tissue of left thalamus," and, in his reply, he again quotes Dr. Carson, "whose honor is not tainted," as coinciding with him in this singular error. What has a man's honor to do with a plain pathological question like this?

In the same connection, I note some extraordinary language used by Dr. Comegys—language which shows how often he mistakes an abusive epithet for an argument. When engaged in demonstrating the position of this cyst, I asked this question: What effect would compression of the left side of the fourth ventricle have upon the muscles of expression? A student correctly answered, "Paralysis of the facial muscles of the right side." "Not a word was said of the relation of the cyst to the hemiplegia! But such a tergiversation as this is a pastime with Dr. Bartholow." Such is the statement of Comegys, who was not present at my lecture, and who probably got his information from some ignorant student who did not know anything about the anatomy and physiology of the part involved.

Dr. Comegys offers some other reflections on this case, which indicate still more decidedly his entire misconception of the relation of the symptoms to the lesions, notwithstanding he was possessed of the knowledge afforded by the autopsy. To prove this assertion, I will quote his own language: "The large one [the cyst that lay under the ependyma of the right ventricle] should have given rise to marked symptoms of altered sensation and motion of the body. These, indeed, he had, but on the *same side* as the large structural lesion, which could hardly have been expected." Any intelligent medical reader will see at once on perusing these observations that Dr. Comegys was involved in a maze of absurdities in attempting explanation of lesions which he did not understand.

But as I do not intend to offer my own opinions against Comegys—oppose assertions to assertions—I will quote from the best authorities the effect which sufficient pressure on one side of the *pons* has in causing hemiplegia. I have already indicated the difference between *irritation* and such pressure as causes destruction of function.

In Ladame's twenty-six cases of tumor of the *pons*, there was hemiplegia, complete or incomplete of side opposite the tumor, in twelve. There was paralysis of the facial in eleven of these. The cyst in the Comegys case involved the left lateral half and the upper side of the *pons*.

"In tumors compressing the *pons varolii*," says Perrenout,<sup>3</sup> "motility is most affected."

Hasse<sup>5</sup> makes a similar observation. "In tumors of the lateral portions of the *pons*, besides the hemiplegia and very common anæsthesia of the opposite half of the body, there is usually facial paralysis or anæsthesia of the side of the face corresponding to the tumor," says Niemeyer.<sup>7</sup>

On this point, as on the others, the best authorities are opposed to Comegys. Whom shall we follow?

To arrive at a correct diagnosis of the position of the disease causing the facial paralysis and the hemiplegia in this case, would have been comparatively easy if Dr. Comegys had understood the method of proceeding. He does not even allude to it, and his blundering efforts to arrive at a diagnosis, *per viam exclusionis*, show that he is not acquainted with it. This method of diagnosis depends on the electro-contractility of the muscles paralyzed. In paralysis from cerebral lesion above the origin of the cranial nerves, the electro-contractility, as Marshall Hall first pointed out, is not lost; on the other hand, in paralysis due to injury of the nucleus, or of the fibers of origin, or of the trunk of the nerve, the electro-contractility of the muscles paralyzed is lost. Applying the electric test, Dr. Comegys could have ascertained whether the paralysis of the facial muscles had been produced by a lesion of the left cerebral hemisphere or ganglia. Duchenne de Boulogne gives (page 659) a case quite similar in its details to this one of Comegys—a case which illustrates the application of these principles—and in the same chapter he discusses fully this mode of diagnosing the position of the lesions. I trust Dr. Comegys will not consider me impertinent in saying that he ought to



master these means of diagnosis before he attempts the instruction of students.

In his "General Remarks," Dr. Comegys favors us with some of his notions on the diagnosis of cerebral tumors, and on their therapeutical management. He has a right to claim much of this as original conceptions of his own.

It will be generally admitted that many cases of brain tumor are obscure in symptomatology, and therefore difficult of recognition. Tumors are sometimes present without being manifest by any objective signs, and the symptoms which some produce are common to various conditions of the brain, rendering a differential diagnosis impossible. Notwithstanding these difficulties and uncertainties, many cases are quite readily diagnosticated if the clinician possess the requisite knowledge for the task. We fear that Dr. Comegys, discouraged by the apparent difficulties of the undertaking, has made no effort to master the subject. Not only so, but he discourages effort on the part of the students, and pleases their indolence by representing the diagnosis of these cases as unattainable, and therefore not worth their while to attempt.

"It is not difficult to recognize lesions of the brain by observing the conditions of function of organs supplied by the cephalic nerves; but to say with certainty what is the nature of the lesion is most often impossible," says Dr. Comegys. And he again remarks: "I repeat, as the sentiment of the best writers, there are no pathognomonic symptoms of tumor, abscess, or softening of the brain."

A physician who looks for "pathognomonic symptoms" will rarely make a diagnosis in any case, for but few diseases are manifest by signs which may be considered to have this degree of significance. Dr. Comegys, in using this expression, simply repeats the words of Gull and Sutton,<sup>6</sup> but these authors whom he has used so liberally without acknowledgment, give, nevertheless, an excellent differential diagnosis between abscess, tumor, and softening. Dr. Reynolds,<sup>6</sup> in his paper in the same work, on "Adventitious Products in the Brain," says that "*in some cases* it is impossible to gain a hint of the nature of the malady, while in others the diagnosis is as certain as that of any disease with which we are acquainted." He refers in the latter part of this sentence to cases, the diagnosis of which "requires merely the application of anatomical and physiological knowledge." Two of these cases reported by Comegys were of this description, *i. e.*, tumors at the base of the brain which, interfering with certain cranial nerves,

afforded Dr. Comegys the clearest indications of their position, if he had possessed the necessary intelligence to interpret them correctly.

"If a basilar tumor," says Niemeyer<sup>7</sup>, alluding to just such cases as two of those reported by Comegys, "destroys the function of several cerebral nerves, one after the other, and in regular sequence, while it spares neighboring nerves, any one having a knowledge of only the coarse anatomy of the brain can decide the seat and extent of the tumor with almost absolute certainty."

In another place this great author gives, in a few sentences, an admirable summary of the difficulties surrounding the diagnosis of cerebral tumors (page 236):

"There is no symptom, occurring during the course of a cerebral tumor, that does not sometimes occur from softening of the brain, from abscess, or from some other local disease. This resemblance can not astonish us; on the contrary, we could not understand how it should be otherwise, since, like other local diseases, a tumor of the brain destroys a circumscribed portion of the organ, incroaches on the intra-cranial space, and interferes with the circulation in the vicinity of the diseased part. *Nevertheless, it is only in rare cases that it is difficult or impossible to recognize a cerebral tumor, and to distinguish it from an abscess or other local disease of the brain.*" (Italics mine.)

Similar views are expressed by Ladame, Perrenout, and others. These opinions are very different from those which Dr. Comegys affirms to be the "sentiment of the best writers." It is obvious that Dr. Comegys was more anxious to cover up his errors in a "generalization" on the difficulties of diagnosis than to state the real opinions of the best writers on the subject.

Lastly, we come to the subject of treatment. Dr. Comegys views on this subject, and his practice, were so extraordinary, that I will not venture to state them except in his exact language.

"In the first case, I (Dr. Comegys) used a seton by which I expected to excite a permanent and vigorous action of the vaso-motor nerves of the extreme vessels of the brain, and thus preserve, as far as possible, the capillary circulation on which the brain tissue rests."

Niemeyer<sup>7</sup> (Vol. II., p. 245), the distinguished professor of Tübingen, has probably not yet learned Comegys' views about the influence of a seton, for he ignorantly says: "It is useless and annoys the patient to apply a seton or issue to the nape of the

neck." In my criticism on this point, I suggested that Dr. Comegys was certainly not familiar with the influence of suppuration in causing amyloid degeneration, a condition of things the very opposite to that "permanent and vigorous action of the vaso-motor nerves of the extreme vessels," which he proposed to induce in this way. He goes on to explain his theory of counter irritation by affirming that irritation "of the sensory nerves of the skin, excites by reflex action the tonicities of the organic muscles of the ultimate vessels, and thus invigorates the capillary circulation." This doctrine he has taught for some years, he informs us. In the final paragraph of his paper he announces an opposing doctrine: "Paralysis of vaso-motor nerves (produced by shock or remote irritation), connected with important centers, give by the resulting hyperæmia or serous exudation notable changes in one or more faculties." In one instance we have "*irritation*" inducing by reflex action, "tonicity" in another "paralysis" of the "organic muscles of the extreme vessels." In my criticism on this singular contradiction, I styled such teaching as this "clinical prestidigitation." In his reply, Dr. Comegys informs me that I do not understand it; this, I freely admit. It is plain, however, that Dr. Comegys ordered the seton because he had diagnosticated "degeneration of the arteries," and because he had *not* diagnosticated a tumor. We have two proofs of this: In his original paper he states that he used the seton to preserve, by exciting the vaso-motor nerves, the "capillary circulation on which the brain tissue rests." In his reply he says, "by the use of the seton, one does not necessarily injure arterial structure," although "suppuration may superinduce amyloid degeneration!"

In this case of Murphy, in whose neck the seton was inserted, Dr. Comegys omitted the only means of treatment which promised the least advantage. His patient had had gonorrhœa, and a "suspicion of syphilis" may therefore have been reasonably entertained, especially as he had been a soldier by occupation. Let me quote again from Niemeyer on this point:

"When there is the slightest suspicion of syphiloma of the brain instead of symptomatic treatment, we should institute an energetic anti-syphilitic course. It is impractical to delay this treatment, or to neglect it altogether, if the syphilitic nature be not accurately determined. Experience teaches that even very severe structural changes are capable of recovery, and often disappear under appropriate treatment. \* \* Hence, we risk little and may



gain much, if on the mere suspicion of syphiloma of the brain, we treat the patient as if there was no doubt about the diagnosis."

Says Reynolds, "I have repeatedly seen the most menacing symptoms of brain tumor removed by the exhibition of iodide of potassium in doses of forty grains, three and four times a day." Instead of affording this poor man the chance for his life, which this plan of treatment gives, Dr. Comegys, in illustration of a vague and unfounded theory of counter-irritation, puts a seton in his neck, and injects strychnia hypodermically!

"I (Comegys) used the hypodermic injections of strychnia, because of the known dynamical properties of that agent for exciting the nervous centers, and so reach by direct action the muscular tissue of the extreme vessels."

I fear the professional reader will hardly credit this quotation, so very extraordinary is it in every respect, but he may verify it and all others that I have made from Dr. Comegys' paper, by referring to the numbers of the Medical and Surgical Reporter for July 9th and 16th, 1870. This last morsel is quoted from the second column, page 54.

Subcutaneously into John Rinke, who had five hydatid cysts in his brain, and into Clara Fisher, who had encephaloid cancer of the left anterior lobe, did Dr. Comegys have *daily* injected respectively one-sixtieth and one-seventieth of a grain of strychnia "because of the known dynamical properties of that agent for exciting the nervous centers, and so reach by direct action the muscular tissue of the extreme vessels!"

Such are the notions of practical medicine which Dr. Comegys instills into the minds of medical students who attend his lectures at the Cincinnati Hospital.

To conclude this somewhat lengthy paper :

Some explanation may be necessary to the readers of the LANCET AND OBSERVER for the appearance of these controversial papers. Dr. Comegys styles my criticism in the *Repertory*, *inveective*. Any one taking the trouble to examine that criticism will hardly agree in this view of it, for although severe, it is nevertheless legitimate. But Dr. Comegys is exceedingly intolerant of criticism. As a teacher of clinical medicine at a large public hospital, his utterances are certainly proper subjects for examination and discussion. The errors which he may inculcate have an effect not only upon the common sentiment of the profession, but in the future practice of the young men who attend his prelections. The

paper which he printed on Brain Tumors, the substance of which he appears 'o have spoken at the hospital, is crowded with errors, absurd in themselves and dangerous in their tendency. The sonorous sentences in which his dreamy speculations are embodied are well calculated to deceive the uninformed medical students. *Vox et preterea nihil.* It is the dut of every one who has any knowledge on the subject, to expose such errors, although it is Dr. Comegys who is grieved thereby. In making my criticisms, and in exposing his errors by the citation of authorities, I do not wish to be understood as denying that he has any merit. Dr. Comegys deserves much credit for what he has accomplished in his profession, despite various hindrances. Commencing the study of medicine at a late period in life, distracted by numerous public trusts and enterprises with which he is and has been associated, and lately absorbed in politics, he can not be expected to keep well abreast with the progress of medical science. But he should not, as he appears to do, employ his leisure moments in the reading of Emerson Bennett's novels. The best intellect will be unequal to the task of keeping pace with the progress of medicine, attending an hospital, running a City Council, organizing a university, meeting various boards, committees and societies, and at the same time managing the harassing details of a private practice. It is not to be wondered at that Dr. Comegys, having so many irons in the fire, should permit some of them to burn.

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[The accurate diagnosis of brain lesions has thus far been generally admitted as always difficult—mostly impossible. Hence, it seems to us that the sharp or ungenerous criticisms of such cases by any pathologist are inappropriate. In happy illustration of this, we have only to call the attention of readers to the celebrated case of Mr. Davis B. Lawler, reported by Prof. Bartholow, in the December, 1869, number, of this journal; a case which deservedly attracted, at the time, considerable medical and legal attention. Now, Dr. Bartholow makes no mention in that paper in his diagnosis of any suspected brain tumor. In explanation of the lesions which he observed, he remarks: "The vertigo seemed to me due, 1. To irregular supply of blood to the brain from *obstruction and regurgitation* at the aortic orifice; 2. To a *structural alteration* of SOME PART of the right hemisphere, as evidenced by the dilatation and immobility of the left pupil." So, too, in his general diagnosis, he speaks of "obstruction and regurgitation at the aortic orifice with mitral insufficiency," etc. And yet, turning to the autopsy, we find he discovered to be sure, as he assures us, these anticipated degenerations of the heart, valves, and various arterial structures; but he, also, describes a "*globular calcareous mass*, a half an inch in diameter, wedged in the middle corner." There is another remarkable point in this case of Mr. Lawler. In this paper we notice that while Dr. Bartholow has diagnosticated most formidable valvular lesions in the heart, suggesting unmistakable mitral and semi lunar insufficiency, we *do not find recorded* any of those cognate symptoms, which ought to accompany such conditions. The patient died aged 82, and yet, with this twenty years of disease of this character, we hear of no oppressed breathing, no enlarged liver, no general dropsy! We do not offer this commentary in any sense of unkind criticism on Dr. Bartholow, simply to point out the extreme uncertainty and difficulty of making any exact diagnosis of these obscure cases of brain lesion. —ED. L. & O.]



## Translations.

*Observations upon the Pathology and Therapeutics of Rabies in the Human Subject.*

Translated from the Jan. No., 1870, of *Memorabilien*, by Dr. T. C. HENRY.

By FREDERICK BETZ.

On the 3d of May, 1869, in the morning, at about 10 o'clock, a young man, seventeen years of age, F. B., was bitten by a dog, which latter, some days subsequently, was found to be rabid, and killed. About half-past 5, of the same day, I arrived at the residence of the patient, and found his injury as follows:

On the back of the right hand, and between the tips of the second and third, metacarpal bones, was apparent a large brownish scar, somewhat circular in form. This was surrounded by a whitish circle, say three-fourths of an inch wide, with an elevated border, appearing, I should say, like the patches present in urticaria. Beyond this circle, the skin was normal in color and thickness. Moreover, there were no evidences evinced of pain or unnatural appearances. Although between the period of the reception of the bite and my arrival, some seven hours had passed, time enough, one would think, and more, for the absorption of the poison of the bite, no present apparent result was yet evident, until I touched the wounded spot with my caustic carrier (or *porte-caustique*,) when there was instantaneously manifested an extension and enlargement of the scar to the limit of the white edges; the bruised wound became larger as the scar showed, or was more clearly defined. I now incised the apparently healthful parts in the vicinity of the scar, and there was at once manifested an amount of suggillation, almost as extensive as if it were a new wound. This hurt would appear to be more serious in extent as one would infer. I applied caustic potash to the surface of the wound (all of a scruple was used,) and

over all applied a piece of hog's bladder, over that a cold compress, and prolonged this over the entire forearm. With the view of lessening the pain, I injected hypodermically about  $\frac{1}{3}$  of a grain of morphia. A copious spirt of blood followed the piercing of the skin, which was a sure indication of feeding of the veins—*i. e.* rapid absorption of the poison.

On the 4th of May, complains of no pain; repeat injection of morphia. Skin moist, diaphoresis.

May 5. Found elbow joint and axillary glands swollen. The caustic wound became almost the dimensions of a half-florin. Injection of morphia.

May 6. Pain in the whole arm; as yet little suppuration noticeable. Injection of morphia.

May 7. Patient had yesterday some belly-ache and diarrhea; to-day, no pain, no thirst, sleep good, pulse 80-85 beats. The caustic crust began to loosen about the sides. Morphia injection.

May 8. The wound more highly inflamed; the loosening of the cauterized scar gave no more diffused appearance; head pained him all over; the tongue thin, having a shape like the commencement of typhoid fever, scooped, no thirst; pulse 60-70 beats, oppressed, retarded. Morphia injection.

May 9. Yesterday vomiting, frequent hallucinations; thirst; swallowed without any trouble; no pain; pulse 60; felt himself better. Morphia injection.

May 11. No pain; general well-feeling condition; the scab more loosened. Injection of morphia, from the effects of which the patient daily experienced a profuse perspiration and a sound sleep.

May 13. The wound exhibited large granulating surfaces. The tendon of the extensor communis digitorum being exposed, the scab not yet altogether come off. No pain; also besides, no exhibition of disease.

May 17. The wound is in a fair suppurating stage; the patient eats and drinks, as in good health, and goes out. The wound has been covered with granulation for as much as five days.

I saw the patient no more until the 14th of June. On that day, the wound was not yet healed. It had remained about eight days nearly on an average the same; the suppuration had ceased, had become dry; the hand and arm were weakly and destitute of power—the whole arm, in fact, very painful; the feeling of the wound, painful; every jar of the body, by movements made, caused

pain in the patient's arm; stinging in the ends of the fingers. All the fingers were sensitive; burning in the soles of the feet, worse than after two days of exposure to frost; tongue red, with an alkaline reaction; pulse 90; patient giving off such a penetrating and disgusting perspiration that no one could endure being near him; headache. These symptoms made on me a very doubtful impression; then, there was no doubt that I had to deal with a harbinger of rabies. I concluded to attempt to calm locally, and to induce diaphoresis along with an effort to thin the blood by the aid of acidulated water. I prescribed one ounce of tr. opii with it, had a small saturated compress placed upon the wound, rubbing hourly the entire arm with the tincture of opium, and, at night, 15 drops of tinct. opii to be taken. Besides I ordered 2 drachms of acid. muriat. dil., every two hours 10 drops in one pint of water.

June 15. The patient had taken nearly 8 pints of water with  $1\frac{1}{2}$  drams acid; evidently perspired very much, and passed much urine, etc.; felt his arm easier, the head freer; the all pervading exhaled odor had filled the whole room. I allowed him to continue treatment.

June 17. Patient tremulous; a swoon occurred, and vomiting, besides the tongue had yet the furred condition, but was somewhat red; the pain indurable. Continue therapy.

June 18. Vomiting; tongue appeared depressed; belly-ache at night, pain in joints, much lassitude. Now, I ordered peppermint-tea to be drank in great quantity, and, at night, 15 drops tinct. opii, to be taken regularly every four hours.

June 20. Since the 14th of June, odor continuing disgusting, the whole room filled with the steaming odor from the patient; one could observe about the same condition of system otherwise.

This lasted about eight days.

June 21. Lassitude pain in the limbs; during nights specially in the joints; belly-ache, thirst; pulse febrile 105, no headache; the tongue moist, not more trough-shaped, but even contracted. The neighborhood of the wound yet bluish red; the impression not very painful, besides the back of the middle-finger, somewhat. No more diarrhea. To provide against the still continuing erythema, I ordered mercury subl., about grs. 2, and tinct. opii s. unguent pp.  $\bar{a}\bar{a}$  ung.  $\frac{1}{2}$ , to be rubbed every three hours into the hand and forearm; tinct. aconite unc. 1, mercury



subl. c. gr. 1, every three hours 10 drops. (Fuchs would have ordered sublimate hg. batts.)

On the 2nd of July, the patient could be considered as convalescent, then he experienced neither uneasiness nor pain in his joints, nor were there other suspicious symptoms present. The wound gave out again healthful discharge of pus.

On the 5th of July, also, nine weeks from the period of the reception of the injury, he commenced again his occupation of a stone-hewer, and has remained since healthful. (January 25, 1870.) The injury left behind a very thick radiated appearance, but an apparently good scar.

This case afforded me a favorable occasion for many a reflection, beside occupying me in the five weeks, representing variations which had all the similarity presented that the onset of rabies often denotes. The wound tardy in healing the secretion of pus, alluded to its dryness. I saw a bluish aspect in it, the nerves connected with the wound round about were very sensitive, a typhoid condition associated with it. The interesting appearances were to me, most especially the all pervading loathness, too appreciable by the olfactory senses, of the transpiration of the skin. As I observed myself surely a similar odor, it seems to that of a dog, which I saw myself as an accompaniment on several occasions. It is, therefore, my firm conviction that were the therapeutics so certainly depicted in this case, that the case must be determined to be an undoubted one of lyssa or rabies. I consider from that circumstance that the case was one in the disease known as lyssa, that the conditions were such that the irritation of the nerves being brought about, was, fortunately, successfully combated, and otherwise the pernicious matter brought out of the body through the skin, and poison modified by the caustic.

This stuff can be looked upon only as organized most assuredly as sebatic acid which produces deleterious action only in the human organism. Astonishing is it to me surely that this offensive transpiration of the skin has, at no time till now, been alluded to. Most assuredly, it should be placed foremost in such diseases, as are produced, and looked for. The allusion to this observation would be very proper in the case of those authors, in furtherance of a knowledge of perspiration or transudation similar to the kind alluded to above, as the first indication of the nature of a blood poisoning or sebatic acid poisoning of the onset of lyssa. (Faber.)

The prominent French physician Buisson detects the preliminary signs of canine rabies, and orders a steam bath, and alone requires the same used in it, and, in short, heals in this way. No doubt, this evidence is to the purpose, then we know that the physicians are careful as other people are, and for that reason also, the imagination tends always. Again it is essential by the most efficacious efforts in the least trace or suspicion of rabies to operate on the skin in the most feasible way; for then we need not entertain a doubt that the disease is located in the nerves of the skin alone, possessing a condition of intense reflex excitability. The transpiration is rendered impossible by it, as the matter in the blood is withheld, and the poison communicated. In some cases of Moesner's (Wiatt Corresp., B. L. 1834) collected cases of rabies, one is only mentioned as being cured.

Our object then should be to make use of the readiest measures by the employment of hot water to the riddance of the perspiration. This trouble is scarcely necessary when deglutition is impossible also in mild attacks from the commencement of the disease, warm or hot drinks are as readily swallowed in this disease as cold. One must, beside, take care not to hand a glittering vessel containing the water, or one must keep closed the eyes of the patient. Often fluids, by their ingestion under the diseases lighter or less severe, drawn through a straw, milk easier than water. But to force down the fluid is to cause spasms to occur more readily. I have ordered my patients to drink water strongly acidulated with chlorohydric acid. The amount of acid and water the patients consumed was considerable. Whether this was of advantage or rational, the organic chemistry process in blood poisoned in a case of lyssa is not asserted. I gave it in a case of pyemia under treatment, then we have in the case of poisoning by rabies with two contrary factors conflicting first in case of disease of the nerves (Toxoneurose, Romberg) and two with disease of the blood. The first is to consider as a primary affection, and last, a secondary process.

I have now recommended the diaphoretic treatment, a full supply of water, a treatment both diluant and diuretic, and the calming of the system is equally important. In rabies the sensorial system is first of all affected (physiological,) finally the motor nerve. Then is this succession of results, not always in a similar way for the reason that the shape is not the same. The diseased condition shows the acuteness of the perceptivity of the nerves of

the skin, which must become obtuse whereby the reflex excitement is retarded. It is this principal tendency which interferes with the early treatment of the onset of rabies. Opium, morphine, atropine, curare, given subcutaneously or by the mouth, chloroform inhalations find the most frequent use, trouble is not aimed at in not healing cases but a little, on account of the customary full blood letting, for that, one must be on his guard. It is as plain an error when one in the case of lyssa so often and so evidently experiments, as when one stands irresolute, and inactive, being of course, a case of rabies as usually a deadly disease. That the most of the cases of lyssa die, depends upon a most rapid treatment, with all, in a furious treatment in which the disease is beset by an artificial death.

I have attained propitious results which one experiences in a more recent period in traumatic tetanus and rheumatism. Since one has treated it with more judgment and less violent measures. An experience well deserved has been acquired also in relation to the disease of lyssa. It is an old practice in the case of tetanus to use baths, sometimes with medicinal additions, as caustic lime, added for the purpose of arousing the entire nervous system, where these measures can be adopted it would appear to apply to the disease of rabies, the same by means of the diaphoretic treatment would be of service on the other side acting so as to calm the tetanically affected entire nervous system.

To what now concerns the local treatment must all attention be bestowed. Trouble attends on some of these cases to a great extent, in others very little. By means of local treatment, one gets at the principle upon which to act in ridding the human body from the poison destroying. No one has ever seen the poison and one should consider it as an hypothesis when not as yet any case has come to light, that through the discovery of the broken skin the poison of a mad dog has yet been ascertained to have taken place. Otherwise let the occasion of the accident, the bruise, the inflammation, the injury to the nerves and their mark, been ascertained first.

For the baneful influence of the poison exerted by rabies, caustic potash alone, is entitled to the highest consideration; various other measures have at one time and another been tried. Still the employment of caustic potash is not everywhere feasible, and required as a preliminary condition. I have previously stated that symptoms may be altogether insignificant, apparently, and below it, lesions



of continuity, crushing, the nerves, and retardation of the flow of blood, not visible to the eye. Such a condition must be considered before using caustic alkali, and therefore the operation of the poison would be caused over a greater extent of surface. Will one be so hardy as to persist in his purpose under such conditions? for the wound caused by the bite would be then the least shut off from the healthy tissue. The gap caused by the bite, and the caustic lastly, are altogether inadequate to use diffusely. If one with a cauterizing solution of caustic alkali,  $\frac{1}{2}$  ounce, with a pencil (or brush) should cauterize, (the pencil should be well saturated) and the application could be defined or limited, the operation in this mode facilitated, the caustic applied at the same time more deeply, all other kinds are far less efficient. Cauterizing is advantageous in other respects; precision of action is one, for no one is sure of the recovery of such kinds of disease in spite of every effort. The cauterization must succeed and be associated with milder measures. It is altogether absurd, that through the agency of emetic, with cantharides, and such like, irritating stuff can be removed, suppuration brought forth with the intention of eliminating the virus. This can only destroy or decompose, but never through the eliminated matter. It is surely so much increased, that through the persevering administration of emetics, the wound damages from the profusion of discharge. Besides, it gives way to the practice when in the outbreak of lyssa; in it the first prodromes, the most disregarded, are calmness; the wound, irritable, becoming dry, is at a stand in the process of healing, it fails in all modes of giving out healthy or laudable pus. Further, the treatment however skillful, is baffled by such a condition in this disease. An important clinical advantage possesses beside the production of artificial ulcers in these cases; because, often in the first place the breaking out of lyssa by means of the recognized appearances signalize, and the physician by means of this mode of acting can hit in time. A daily control over the wound, as generally found, is therefore for months the task of the physician, by which physical changes deserve all attention as gastro-intestinal disturbances which also appertain to the prodromes of rabies. Then the physician operates in a very much more effective sphere; a fortunate turn of his therapy leaves him much more yet to hope, when as yet the disease has not as yet reached its highest point. The prodromes of lyssa must surely be studied as symptoms since it is so important. *Obsta principis.*

The time of cure as long as the wound is yet cauterized is hard

to determine. In this case one can not judge of the time required for restoration, the foresight is in any case carried beyond the calculation. In every bite wound so cauterized so long as no demonstration of the harbinger of lyssa is evident, one must consider the virus as in a state of ferment, that shows a long period must elapse before bringing about an exhibition of the result of the virus. In plainer language should one cut short and cauterize incipient lyssa? In regard to this proceeding, let us make no delay because the system is already diseased, but here let me say that a local treatment in the way of calming the erythismus of the nerves stands us in hand. If it is of advantage to leave the affection disregarded, for in it the idea may exist, that he, the patient, may be poisoned, it appearing very doubtful whether it will do to interfere or take any action in the matter, then it is not increased; the suspicion of the outbreak of the disease might act etiologically, so little, any one becomes fearful before the onset of the pus. I hold that it is far better that the patient confined in bed in the evident danger in the state of suspense, be left to live on carelessly.

The result of the imagination exists in fear or in courage, exerts up to the present an influence in the ingress to lyssa. To this end, I would still employ at once, attention to the exterior treatment which I did repeatedly in cases of mine, to a considerable extent to my patient, who expressed the beneficent and easing treatment of the wound, as also of the entire arm. This narcotizing action of the nerves of the skin which rubbing on the tincture of opium had effected, must have promoted lowering of heightened reflex nervous action; thereby, sooner conducted the transportation. I advise, therefore to rub not only the injured limb, but even the entire surface of the body with tinct. opii, that the nerves of the skin tingle, and attend to as much of this medication as the internal or subcutaneous employment of opiates. Only were there now oftener frictions of purer opium applied, there would be known its efficient quieting and sleep-producing action.

(Professor Halford, of Australia, has successfully treated cases of animal poisons in dogs by hyperdermic injections of ammonia.)

*On Wounds of the Heart and Pericardium.*

[Translation of a Review of George Fischer's Monograph. *Gaz. Hebdomadaire*, Nov. 20, 1868.]

By JOHN D. JACKSON, M. D. Danville, Ky.

The subjoined extract, translated from the No. of the *Gazette Hebdomadaire*, for Nov. 20, 1868, and which it seems is itself a translation from the German, (*Archiv für Klinische Chirurgie*), we present as a summary of the largest compilation of cases yet published; and a knowledge of which will tend to correct certain erroneous impressions regarding the necessary fatality of wounds of the heart, which are not confined to the people at large, but pretty generally permeates the profession.

It seems that Fischer is not the first who has engaged in the collection of statistics on the subject, but that Jamain collected and published, in 1857, most of the important cases known, and which amount to 121, and that Salle and Zanetti have likewise published memoirs. Zanetti in 1866, publishing 153 cases. The work of Fischer is a type of German scientific works, and contains within its 340 pages the history and an exhaustive analysis of 452 cases of wounds of the heart.

The history of wounds of the heart goes back to the time of Homer, and the combats of Idomeneus and Alkathous, of Patroclus and Sarpedon, with an account of the symptoms and gravity of the wounds. The first record of a case of a wound of the pericardium, dates from the time of Benivenis, (who died in 1503), and Cardenas, who, about 1501, chronicled an authentic case of cure following a wound of the pericardium, with loss of substance. Ambroise Paré first of all described a case of penetrating wound of the heart, with a microscopic examination.

Fabricius, of Hildamus, did not think wounds of the heart were necessarily mortal, and cited in support of his opinion a case in which a young man lived many months after a wound of the heart. Coming down from this epoch, at which it began no longer to be thought that such wounds must prove absolutely fatal from numerous records, from the most scrupulous observations, from experimental researches and rare observations upon animals, the interesting nature of the complete study of the subject is shown, and how precision in diagnosis is attained; a thing so generally difficult, but the importance of which is evident in both



a prognostic and therapeutic point of view. While ancient experience left no hope, experiment and exact observation seem to encourage efforts to cure.

Wounds of the heart are relatively rare lesions, and are principally observed in the practice of civil surgery, suicides, duels or murders. They are rare on the field of battle; for instance, the sixth circular of the War Department shows that in the American war, of 87,822 wounded, among which are 7,062 gunshot wounds of the thorax, 4,759 wounds of the thoracic walls, and 2,303 penetrating wounds of the chest, there were only observed 4 cases of gunshot wounds of the heart. The 452 cases collected by Fischer, he divides into 401 cases of wounds of the heart, and 51 of wounds of the pericardium. These he subdivides according to the seat, and order of frequency, into 123 wounds of the right ventricle, or 27.2 per 100, 101 wounds of the left ventricle, or 22.1 per 100; the pericardium alone has been found wounded 51 times; the right auricle in 28 cases; the two ventricles in 26 cases; the left ventricle in 13 cases, and the partition walls in 7 cases. The frequency of ventricular lesions (257) compared with those of the auricles, (31) will be observed. Furthermore, the relative proportion of wounds of the right and left sides of the heart, are different from what had been previously supposed, since we find 155 wounds of the right to 119 of the left side; the proportion between the two sides being 1.3 to 1, and not 2 to 1, as Jamain declared.

The division of wounds into penetrating and non-penetrating, shows that these last appertain especially to the ventricles and apex; in effect, for the right ventricle there were noted 9 from penetrating wounds to 107; and for the left there are exhibited 7 to 95, and for the apex 7 to 12. The auricles showed no non-penetrating wounds.

The author goes on to form comparative tables of the seat of wounds, the nature of the wound, whether due to a pointed instrument or fire-arm; to a contusion or rupture of the heart; all these etiological conditions being discussed with care. In the chapter devoted to the pathological anatomy of the subject, there are the most minute indications as to form, direction, the cauterization of the wounds, and a complete study of foreign bodies in the heart.

These tables indicate the connection between the lesions and the different points of the chest injured. The results are curious to study, for they show to a certain extent the most prominent points in the study of the reports of experiments in the amphitheater,

and as is known to the present time, opinion has not been fixed on this subject. However, the results of observation seem to be in exact account with the divers reports of Luscha and exposed by the author in the beginning of his work.

The intercostal spaces most frequently injured in the order of their frequency on the left side, are the fifth, the fourth, the sixth, third and second spaces. On the right, first the fourth, then the third, fifth, second and seventh.

He then goes into minute details, telling of the connection between the penetration of certain points of the chest; injury to certain parts of the heart; for instance, if on the left side, an instrument penetrates between the second and third rib, generally the right ventricle, though sometimes the left, the partition wall and the pulmonary artery are wounded. Between the third and fourth rib the pulmonary artery can be wounded, or the right ventricle; but if the instrument deviates toward the rear, the left ventricle can be injured. The aorta is not exposed to injury except when the instrument deviates toward the right.

At a level with the fourth rib the ventricle has been wounded twice, the wound being at an equal distance from the nipple and the left sternum border. Between the fourth and fifth rib, double lesions are encountered, as between the third and fourth rib, it is oftener the right ventricle than the left, and the right auricle has been wounded with the aorta. On a level with the fifth rib and a finger's breadth and a half from the nipple, the wound strikes the left ventricle and the coronary artery. Etc. etc. etc.

He then lays aside the consideration of the symptoms and diagnosis, to speak at length of those cases in which the patients have survived. He presents here, not only a question of curiosity, simply, as it was for a long time considered, from the impression that wounds of the heart were invariably mortal; but we have facts often exhibiting themselves as dependent upon organic lesions.

Before this Jamain had marked out 121 cases, with 10 cures; Zanetti about 152 cases with 9 cures. Dr. Fischer, in a collection of 452 cases, records 72 cures, among which 36 have been established by autopsies, made a long time after the wound, and 36 are confirmed by the symptoms alone.

On separating the wounds of the heart, and the wounds of the pericardium, the following are the results: in 401 wounds of the heart there are found 50 cures, 17 of them being established by

autopsy; in 51 wounds of the pericardium, 22 cures. On scrutinizing closely the doubtful cases, we have obtained finally the proportion of 10.7 cures to 100 cases of wounds of the heart, and 30 cures to the 100 cases of wounds of the pericardium.

Applying the percentage to those wounds, the seat and cure of which are established anatomically, the following proportions are obtained: wounds of the apex 18 to 100; wounds of the septum 14 to 100; in these cases which are not penetrating, wounds of the right ventricle 9.7 to 100; of the two ventricles 7.6 to 100; of the left ventricle 5 to the 100.

On the other hand we have no wound of either auricle which has been cured. In one case, the coronary artery, examined 63 days after the reception of the wound, presented a cicatrix. If the nature of the wounds are viewed, it is seen that wounds by instruments of puncture enter 18 times to the 100 in the total of cures; wounds by fire-arms 8.4 per 100; wounds by cutting instruments 8 times to the 100. Recovery from rupture of the heart remains very doubtful, since there can be cited but a single case, that of Cavasse, or where there was found a cicatrix attributed to rupture of the heart.

A curious fact noted, is the presence of foreign bodies in the heart, demonstrating the fact that the opinions regarding the irritability of this organ have been exaggerated. Thus, in 12 cases of recovery, there were foreign bodies in the heart. In 8 cases of cure following punctures from needles, 6 times needles were found in the heart, and in one case, even a pin. In 7 wounds from fire-arms, in which the patients recovered, 4 times the ball remained in the heart; finally, a ball was gotten from the pericardium. It is unfortunate, that in the majority of cases, the description of the cicatrix does not permit a decision as to whether the wound has been penetrating. One may likewise comprehend how it is that we can not draw deductions of a very precise character regarding cases of cure, in which the symptoms alone have served in the diagnosis of a lesion or a cicatrization. Furthermore, it can be avowed that, in these cases counted as cures and verified by autopsy, the wound and its complications have often been themselves the cause, more or less directly, of the subsequent death; thus, our spontaneous ruptures, our aneurism, an endopericarditis ten years after the lesion, a perforation of the septum, nineteen years after the cure, and likewise an embolus, can be considered as tardy complications. But that which Dr. Fischer has



made to stand out in bold relief after Jamain and Zanetti, is the possibility of cure. The prognosis will not be very greatly modified, every wound of the heart will none the less be considered as probably mortal; nevertheless we may learn to recognize the fact that, in some cases, we ought to retain some hope.

The reading of the work of Dr. Fischer shows that, in certain cases, the numbers speak for themselves, though one may reproach them for doing no more than confirm that which reason and a very limited experience, had made very presumable. In uniting in his memoir a resumé of 452 cases collected by himself, the author now renders researches upon the subject of which he has treated very easy.

As pertinent to the subject we may here quote a case reported by Dr. Finnell, to the New York Pathological Society, at its meeting of December 9, 1865, and to be found in the "Medical Record" for January 1, 1869.

"Dr. Finnell wished to call the attention of the Society, to a peculiar formation of stab wounds in the heart which he had noticed in a number of instances, and took occasion in that connection to refer to the case of Felix Larkin, presented at the previous meeting. The wound in that instance, as in others of a similar character, was more or less irregular in shape, and seemed to be formed of two distinct cuts that met each other at an acute angle. As there was only one external wound to correspond with one of the viscus, it was clear to him that the appearance of a double stab of the heart could only be explained in one of the two ways: either upon the supposition of the thrusting of the weapon at the time of the withdrawal, or by the contraction of the wall of the organ at the moment it was pierced. The latter was the most probable reason, and assuming it to be the true one, an important question in medical jurisprudence could be settled by it, namely, that the heart-wound was, if not the very first one inflicted, the one that caused death."

## Medical Societies.

## CINCINNATI ACADEMY OF MEDICINE.

WM. CARSON, M. D., PRES'T.

J. T. WHITTAKER, M. D., SEC'Y.

*Dr. Thomas Wood* presented to the Academy a specimen of larynx, with a history and commentary upon the case. It possesses two features of interest: One from its intrinsic character, and one from the nature of the treatment. *Dr. Wood* commented upon the folly of sending to "the East," or to foreign lands, cases, whose character is as well, or, as in this instance, better understood at home. An instance is related of a wealthy lady of nervous temperament, afflicted with ennui and hysteria. She became dissatisfied with the treatment prescribed, and visited New York. An eminent psychologist there, after a prolonged examination with the ophthalmoscope, with which he professed to examine the different parts of the brain, diagnosticated to her entire satisfaction a slight lesion of the medulla oblongata; else than this, her brain was pronounced in excellent condition. The Doctor then criticized with some severity this play upon the psychical nature, which he denounces as simple humbuggery, continuing that even some cases of insanity are said to be recognizable by this means. He was reminded of a case of epilepsy of some years' duration with a German, of this city. After a failure of the ordinary remedies, as the lesion was evidently organic, the patient betook himself to a female mesmerizer, who was enabled to render a graphic description of the nature of his disease. There is a striking similarity between the pretensions inside and outside of the regular ranks, and but little difference in such cases between the honesty and integrity of the two.

The specimen presented, to-day, is the larynx of a well known citizen, of our city, who was under the charge of several of our physicians, five or six years ago—a case of tuberculosis. The disease was recognized, and the diagnosis established. In accordance with the advice of the physician who had him longest under

treatment, he traveled to the continent of Europe. During his travels, which were rather extensive, as the climates of different places were found injurious, he consulted the most eminent foreign practitioners, who all agreed, that his lungs were free from disease, and the principal difficulty was located in the throat. Bennett had admitted a slight consolidation of the right lung, but with the others had referred the main trouble to the larynx. He now fell into the hands of the specialists, but, as his general condition continued to deteriorate daily, he returned to this country. In New York, he visited Ellsburg, a laryngoscopist of that city, who added his testimony to the others as to the character of the case. His diagnosis was a fungous growth upon the vocal chords. Ellsburg operated some twenty or twenty-five times, each time removing a small portion. His health continued to fail. He was in danger of strangulation in deglutition, and finally the operator was compelled to desist. The patient was then referred to a specialist in Philadelphia. Here he was again operated upon, three times. At last, debility and emaciation increased to such an extent, as to necessitate his return home, some two months after which his brother requested Dr. Wood to see him. He was found unable to speak above a whisper, deglutition was exceedingly difficult. He was reduced in flesh and strength, and was expectorating a pint of pus per day. Advanced disease was manifest in both lungs. When the diagnosis was expressed, it was to the surprise of both the patient and his family. The upper lobe of the right lung revealed a cavity of the size of the fist, its walls a mere shell of the pulmonary tissue. The lower portion of the right lung was in a state of consolidation. The left lung contained a cavity of the size of a hen's egg, and was else studded with tubercles. The larynx shows the work of the surgeon. The left vocal chord is severed in two places, and in other places notched and cut away. The right chord is intact, its mucous membrane much thickened. The natural projection of the epiglottis has been removed. There is an incision at the base of the arytenoid cartilage, which was previously ossified, and is now necrosed. The necrosed point projects in the pharyngeal surface, making the orifice through which fluids penetrated into the larynx. It is probable that the whole lesion of larynx originally was the same thickening of the mucous membrane of the left chord as is observed in the right.

*Dr. Thornton* remarks upon the interest of the case qualifying the criticism of the previous speaker, in the case of the lady, by



the allowance that should always be made for the statements of patients, and their not infrequent misrepresentations, and in the case of the larynx by the supposition that the tuberculosis was a subsequent development.

*Dr. Lullow* inquires if there is not very frequently a coexistence of laryngeal and pulmonary lesion, reflecting upon the operators in this instance.

*Dr. W. W. Dawson* reports a case of brain lesion, from the hospital. Friday night, a week ago, the patient was struck with a hatchet upon the side of the head. He was brought to the hospital, at 10 p. m. The physician in attendance reported the escape of about a tablespoonful of brain substance. This recurred on the next morning. On receiving the accident, he was insensible for a few moments, but since his entry, he has responded intelligently to questions. There is still considerable mental hebetude. The fæces and urine are regularly discharged. The pulse is from 75°-80°. The temperature ranges between 100° and 104°. *Dr. Dawson* hoped to be able to report further progress, as it is a case in proof of the comparative immunity attending severe cases of considerable loss of cerebral substance. To-day, the aspect of the case is not quite so flattering.

*Dr. Stevenson* reports an accident to a farmer's boy who swallowed a fragment, 1 $\frac{3}{4}$  inches wide, of a new ax, which sprung off as he was chopping wood. Both corners were as sharp as a knife blade. Some three or four days afterward, the fragment passed per rectum, attended with pain and hemorrhage. The discharge was assisted by the hand.

*Dr. Vattier* regards this case in corroboration of the old view of the action of medicines by specific gravity. Several humorous instances are mentioned, in which bullets and buckshot proved of value.

*Excipients for the Administration of Quinine.* *DR. UNZICKER*, Chairman of Committee, makes the following report:

This subject being referred to the section of "New Remedies and Pharmacy," who beg leave to report: That in 1868, at the suggestion of *Dr. C. R. Prall* of Philadelphia, (*Am. Jour. Phar.*, 1868, page 517) the syrup of chocolate was prepared for that purpose, and disguised the taste perfectly. But a trial with it proved a failure. A child, of 14 years, took 32 grains of quinine in 48 hours, combined with this syrup, without any effect whatever against the chills and fever. It was supposed from this that

chocolate so effected the quinine as to destroy its antiperiodic properties, and quinine pills were given instead. Others recommended the fluid extract of licorice for the same purpose, which also disguises the bitterness of quinine, but most likely with the same result.\* By the addition of an acid, the bitterness is instantly restored, and it has been suggested that to make quinine effective, when given in the above mentioned combination, a small quantity of acid should be given immediately after. As this rather complicates matters unnecessarily, it is far preferable to give to children, or those who have an aversion against the bitter taste of quinine, pure cinchonine, which has no bitter taste, and is a very effective febrifuge and tonic. A very good vehicle for the administration of quinine, and one that will not interfere with, nor lessen its action, is strong coffee with a little sugar, but without milk. A decoction of green coffee is a favorite antiperiodic with the Mexican physicians. The quinine mixed with the compound elixir of licorice referred to this section, is only in part deprived of its bitter taste, and by the addition of a little sulphuric acid, as shown in the specimen hereby presented, turns instantly very bitter. One of the best methods to give quinine to adults, is to surround it with some stewed apple. In this way it can be swallowed, without any taste whatever. Undoubtedly, quinine will not act as promptly where there is a deficiency of acid in the stomach, as where there is a proper supply.

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DR. B. D. GIFFORD reports to the *Boston Med. and Surg. Journal*, a case of poisoning of a child three years old, who had eaten seven "worm lozenges." The symptoms were those of strychnia, and the indications of the present strychnia were found in lozenges from the same parcel. The vermifugal agent was supposed to be santonin. In the *U. S. Dispensatory* a similar case is related, which occurred in France nine years ago. The patient was poisoned by what was considered an overdose of santonin, but strychnia was afterward detected. How came the strychnia in the two parcels of santonin? Or was there some other toxic element developed in the manufacture of the santonin, resembling strychnia in its physiological and chemical relations?

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\* Some more experiments, however, are necessary to determine this fact.

## Correspondence.

### *Dr. Bartholow—The "Wade Case."*

[In the last May number of this journal, we published for Dr. Bartholow his report of the case of Mr. W. J. Wade, which, it will be remembered, created much discussion, both in the Academy and even in the public press. It will be born in mind that the report claimed for Mr. Wade's death, a condition of œdema of the glottis. The following comments were prepared as a part of Dr. Comegys' communication for last month, but laid over at the last hour of publication. They were subsequently incorporated in his *Enquirer* article, and by request are now reproduced here.—ED.]

Dr. Bartholow not only tried to mislead the public, but went to the Academy of Medicine to impose on his profession altogether another sort of case, and debated it chiefly with Dr. Richardson on false issues. But the great majority of the doctors were sure all the time of the general truth, that Mr. Wade perished by an overdose of morphine, and not by a dropsy of the larynx, *œdema of the glottis*. All felt that he had made a terrible mistake, done in good faith, undoubtedly; for all men are liable to make grievous mistakes; with physicians it is one of the sad risks of their lives. The outrage consists in his attempt to put into medical history a wholly false issue, and to inflict on a young desolate wife the charge of fatal neglect in watching a "perilously sick" husband. This, be it remembered, is the work of a man who says "*that his position has been to conserve the interests of science on one hand, and the lives of poor patients on the other; that this has required great moral-courage,*" etc.

I now offer remarks of Dr. Bartholow and the family statement in succession; and I am authorized to refer to William Smith, Esq., of the Merchants' Exchange, the father of Mr. Wade's widow, for the true history. Mr. Wade was sick with common quinsy.

#### *Dr. Bartholow's History.*

"I was called on Tuesday, March 15, in the afternoon. Patient sick three days. Examined throat with finger; felt the swollen tonsils on the epiglottis erect and swollen, found quinsy of *serious form*.

"I gave  $\frac{1}{6}$  grain morphine and 1-123 gr. atropia, hypodermically to relieve neuralgia.

#### *The Family History.*

"Dr. Bartholow was called in on the 15th of March.

"He remarked that the pains would increase until the tonsil suppurated; but assured the family that there was not the *slightest* danger.

"Next the doctor expressed surprise that the hypodermic injection had produced so little effect. He examined



"I was sent for on the next morning, 16th.

"I found him in the same condition as on the previous evening; hypodermic injection had not relieved him or caused sleep; continued previous treatment.

"I saw Mr. Wade at 5 P. M. He appeared more comfortable, but complained bitterly of the *tic douloureux*, *excessive difficulty in swallowing and sense of suffocation*. He was constantly engaged at this time in dislodging the tenacious mucus which collected rapidly in his throat.

"Found the right tonsil had receded somewhat and there was more space.

"I had determined if there had been *no diminution of infiltration of tonsils and epiglottis to incise freely, but there seemed to be no necessity for so severe and alarming an operation; it was postponed till morning*.

"Mr. Wade now insisted on relief from pain. He declared he could not exist through another night without sleep. I then administered hypodermically  $\frac{1}{4}$  gr. morphia, 1-96 gr. atropia. I also wrote prescriptions for two doses chloral, 15 grs. each, to be sent for if the injection did not relieve him. I expressly stated to his friends present that the injection would be likely to relieve pain and procure some sleep—that the relief of the pain would continue twelve hours—not to have the chloral, if the relief was as decided as I anticipated.

"At 6 o'clock Mr. W. ate ice cream. *He then fell asleep and slept until 8 $\frac{1}{2}$  P. M. when he awoke spontaneously*, said to his wife (in view of her arduous nursing and vigils) that she had better retire, that his pain was relieved and he should have a comfortable night.

the throat, said it was as he expected, more swollen, that if it did not break before afternoon he would lance it; pronounced Mr. W. better on the whole. About noon, on giving him egg-nog, he rejected it with considerable *matter*, and then rested easier. At 3 P. M. took oyster soup, and *swallowed with little pain*.

"Dr. B. said when he called again that the *left tonsil had slightly discharged, that the right one was considerably reduced*. He would not open it more until morning.

"He gave another hypodermic injection of morphia about 6, and was surprised when about ten minutes after Mr. Wade did not seem affected as he had increased the dose, and remarked that he was a much stronger man than he supposed.

"He then left a second prescription in case the injection failed to produce sleep; the first dose to be given at 8 P. M., and at two hours' intervals if needed.

"When asked about giving medicine during the night he replied, not to disturb him, that all he needed was rest, and told the friends to go home, assuring all that there was not the slightest danger—that Mrs. Wade also could go to bed. What assured us all the more was that after the doctor was gone, say at 7 P. M., Mr. Wade ate a large saucer full of ice cream, *swallowing easily, and sat up until near 9, and conversing with me, said he felt well and free from pain*. After this the medicine began to affect him. The first indication of the effect of the drug was a dullness of hearing, and a great sense of drowsiness. He looked stupified and began nodding. He was advised to lie down. In a few minutes after he roused up and asked me if I was not ready to retire. At 9 P. M. he opened his eyes and

"Mrs. W. retired soon after, laying down by his side. *Before falling asleep, probably at 9 P. M., she observed that his respiration had a peculiar character, crowing or snoring, but as he always snored in consequence of a chronic affection of the fauces which he had, she thought it not singular.* At 11 P. M. she awoke with an indefinable fear, and found that her husband had expired. Her awakening was immediately subsequent to the sudden cessation of this loud, crowing respiration. It was the sudden silence undoubtedly that awakened her. I was immediately sent for, and also Dr. Norton, who pronounced the man dead. On my arrival his skin was warm, *dry*, and pupils dilated.

"I at once applied the test—atropia to the eye, for these cases of suspended animation in which respiration and circulation have ceased without life being entirely extinct, and I thought I perceived some dilatation of the pupil take place. I then tried artificial respiration without avail.

\* \* \* \*

"When Mr. Wade manifested a disposition to sleep *he should have been closely watched, and when the peculiar crowing inspiration occurred characteristic of extreme œdema of the glottis, I should have been sent for at once.* It is in this condition of things that the prompt performance of tracheotomy will sometimes save life.

\* \* \* \*

"My reasons for giving the (last) hypodermic injection was, *the patient suffered acute pain, and needed rest, the difficulty of swallowing being so great* that it was unwise to add anything more, to the material he was already taking, and from the well known power of morphia and atropia to arrest

drowsily smiled at me, as I lay facing him.

"I noticed the singular ease with which he breathed, contrary to his usual habit of snoring. His face was warm and dripping with perspiration, and clothing damp. I laid down quite satisfied and soon fell asleep. At 10:45 I awoke, looked on Mr. W.'s face, was startled at its palor; it was cold, the body warm and covered with perspiration. His heart had ceased action. He had not moved in the slightest degree since I last saw him except that his right arm was outside the cover which was not moved.

"I sent for the nearest physician and for Dr. Bartholow. Dr. Norton came first and pronounced Mr. Wade dead. At 11-20 the messenger for Dr. B. returned and said *he would not come, and was angry at being disturbed, and told him to tell me to give him the chloral.* I sent the man back with instructions not to leave Dr. Bartholow's house until he made him understand that Mr. Wade was dead, and to bring him with him. Soon after the doctor came, looked very much frightened, shook the body, asked if I had given the chloral. I told him I had not."

"Mr. Smith says, 'When I arrived about midnight Dr. Bartholow was administering an injection. (Mr. Wade had been dead over an hour!) He then practiced an artificial respiration for an hour longer and had the extremities rubbed. *I heard air passing in and out the lungs.*' He left at 1½ A. M."

"On his way down stairs, the mother of Mr. W. asked what was the cause of her son's death. The doctor replied 'I do not know, unless it was the will of God.' He was greatly excited, and

the secretion of the fauces and larynx. begged that his reputation might be spared."

\* \* \* \* \*

"Then Mr. Wade had little susceptibility as shown by first dose."

But few remarks need be added: What was to be done? Doctor Bartholows' circle is taught to believe him nearly infallible. To appear as making this fatal blunder was not to be thought of. So he went to work, rapidly, to prepare a case of death by sudden œdema of the glottis, (quoting an immense array of authorities) to clear himself of all responsibility, and then throw it on the family who left his patient to perish while they were indulging in sleep. Compare his account, falsely made, with the wife's simple statement. "He," he says, "should have been sent for when the peculiar respiration occurred," [there was no such respiration]; but, when he was sent for—when the wife found her husband dead, he had no thought that there was a possibility of danger, just as he had assured the family at 6 p. m., when he left; and he *refused to go to see him, but sent word, "give him the chloral."*

Dr. Norton pronounced him dead when he arrived at 11-15; says he looked like a man who had died of opium. The case was utterly hopeless, and after staying nearly an hour left, yet when Doctor Bartholow came, after he had been dead an hour, *gave him an injection* (not mentioned in his report), *nullis defunctum malis affici*, and practiced artificial respiration upon him for an hour longer. This done on the body of a man *whose throat was closed up by dropsy!*

It is evident from Doctor Bartholow's effort that he believed that Wade died from the dose of morphia. Nearly every physician in the city believed it, but they were confused by Dr. B.'s statement, that after Mr. W. had been asleep quietly for three hours he *awoke spontaneously* and held a conversation with his wife, that during this second sleep Mrs. W. remarked the loud snoring or crowing respiration. All this we now know to be false, all made up by Doctor B. Mr. Wade did not go to sleep until 9 p. m., and so far from his breathing being labored, Mrs. W. says: "I remarked the *singular ease* with which *he breathed, contrary to his usual habit of snoring.*"

Could a man die so calmly as not to wake his wife by his side, or disturb the bed clothing?

Niemeyer, whom he quotes, represents it just as every one knows who has witnessed it, as a terrible struggle, every



muscle of respiration in intense action, the sufferer hissing out, "'Tis strangling me," "I am choking," "Here it is," grasping the throat, "I am dying," fear and desperation depicted on the countenance; dashing about, springing up, until at last the countenance gradually becomes livid, the consciousness is benumbed, the efforts weaken, the extremities grow cold, rattles are developed in the chest everywhere, and in quiet insensibility, death closes the scene. What a contrast to the easy, unstruggling death by morphia.

Why did he not demand a *post-mortem* examination when his reputation was so fearfully at stake, as did Doctor Williams in the case of Earl St. Maur? Moreover, why did he not have a consultation as any prudent physician must have done if the case were as serious as he pretends?

His reason as given in the Academy of Medicine for not making a *post mortem* was, "the family was greatly distressed and comparatively strangers to him." Such reasons have not deterred the doctor from going into strange and distressed families and rushing into an examination when another physician was concerned.

This man who has had the audacity to attempt to deceive the profession and the public, is he who has attacked my intelligence and integrity in so gross a way, and is assailing the management of the hospital.

This is the man who has abused in so many instances which can be named, the practice of hypodermic medication, until the newspapers have lampooned him; who has reduced it to a trade as he has made plagiarism and case-making a fine art, showing off his publications with poppy-cock pedantry and imposing them on uneducated people.

Finally, Mr. Editor, I hope that by this article the public will feel, first, that our city hospital is under such careful administration as places it on a level with all the first-class institutions of its character in the land; and, secondly, that the man who has sought to defame it, is unworthy of public confidence.

C. G. COMEGYS.

We print the following, which the readers may enjoy for what it is worth, as it comes anonymously :

*Pleasant Valley, O., September 6, 1870.*

PROF. E. B. STEVENS: While reading in the last number of the *Cincinnati Repertory* that characteristically, spiteful and undignified criticism—if the article can be dignified to such rank—by “Captain” Bartholow, in which he arraigns Drs. Comegys and White, and would even have them deposed from the staff of Cincinnati Hospital, because of mistakes made in the diagnosis of certain diseases of the brain, so universally conceded to be obscure and difficult of diagnosis, I wondered whether the astute Professor had entirely forgotten a somewhat famous diagnosis of aortic aneurism, which he himself made in the winter of 1867–68, at the Good Samaritan Hospital, and in which diagnosis he was so positive of his correctness,—another characteristic of the “Captain,” that he invited each member of the class of Ohio Medical College to make a personal examination of the patient, that all might learn from this *plainly marked case*, the peculiar “thrill and bruit” which the Professor was careful to point out, and explain as being “almost pathognomonic of aneurism.”

And I, also, wondered if the Professor has any recollection of the *post-mortem* revelations of said case, he having made the *sectio cadaveris* some time later in the year; but, fortunately, after the students had dispersed, so that there was no call for a pathological exhibition! If his memory fails him, Dr. Murray, ex-resident physician of the Samaritan, will doubtless be glad to inform him that *no sign whatever of any aneurism presented*.

“There is no diagnoser like the pathologist,” was once a favorite expression with the Doctor, when chuckling over some mistake in diagnosis, fancied or real, discovered in the dead-house. Is there not some danger of him, forgetting his “pet” sentiment, at least when his own cases are concerned!

*Query*.—Which requires the greater skill; to diagnose an aneurism of aortic arch, or to give the exact location of lesion in a case of paralysis? Respectfully,

KELPIE.

## Editorial.

**The Cincinnati Hospital.**—Many of our readers have been aware that persistent attempts have been made to depreciate the character of this great charity—its management and the capacity of its staff. Growing out of these there have been raised other issues equally unjust and ungenerous. At home the animus of these efforts is so well known, as instigated for purely selfish considerations, that their notice would have no attention on our part were it not that so many of our friends at a distance are liable to be improperly influenced; hence we deem it our duty to remark upon the subject briefly. We shall not take part in the difficulty between Drs. Comegys and Bartholow—for these gentlemen are able to fight their own battles—but in what we have to say we shall first allude to this matter so far as to place the Hospital right before the profession. It is proper then to remark, that growing out of a chronic state of ill feeling between Dr. Bartholow and other members of the staff, the Trustees deemed that Dr. B. was no longer serving a useful purpose, and they dropped him from the staff. We have no purpose to serve by speaking frankly of these matters, except the general good. We have never held any staff relationship to the Hospital, and have reached a time of professional life when we never expect such position. We think the following extract from Dr. Comegys' letter to the *Enquirer*, in the main, gives a truthful condensed narrative of the matter, so far as the pathological department of the Hospital is represented:

"Dr. Bartholow holds out the opinion that he has been the only pathologist of the house; that upon him *has devolved the solemn duty of pointing out, in the dead-room, the errors of the practice of the wards; that because he has fearlessly done his duty he has given offense; that his position has been to conserve the interests of science on the one hand, and lives of poor patients on the other; that this has required great moral courage, etc.*

"The Pathological Department of the Hospital is *unique*. I believe that no other general hospital in the country has a similar one, and I may be allowed to add that its creation was my own suggestion to the Board when reorganizing the Hospital nine years



ago. I did so from having seen its great value while a student at Guy's Hospital, London, many years since.

"At first there was only one pathologist, Dr. William Taylor. Three years ago Dr. Bartholow *applied* for an appointment, and but for the potent aid of Dr. Judkins and Mr. Brannan, whom he now treats with so much scorn, he could not have got in; indeed, it was held under consideration some time, because a gentleman who knew Dr. Bartholow better at that time than any one else, informed some Trustees that he would be likely to make trouble in the future by attempting to injure the reputation of others. But he went around amiably to each Trustee, and solicited the place, and was finally successful. The service was then divided between him and Dr. Taylor. It soon began to appear that he was anxious to destroy the reputation of every one when it would exalt his own. Yet he was borne with.

"Dr. Taylor obtained leave of absence two years ago, that he might visit Europe, and Dr. William Carson was appointed on the staff to take his place *pro tempore*. The services of Dr. Carson were so faithful and so satisfactory to the Board and staff that when Dr. Taylor returned Dr. C. was appointed a full member of the Pathological staff. Now, every professional man in the city will freely concede to Drs. Taylor and Carson the highest capabilities for their positions, and as citizens they are extensively known and irreproachable. In the mean time, the course of Dr. Bartholow had become so outrageous, not by exposing frauds, as he falsely states, but by misrepresenting every one he came in contact with, and seizing cases of great interest that occurred in the practice of the house and publishing them, when that is the acknowledged right of those who had the responsibility of their management. Moreover, he avoided purposely, obtaining the knowledge of the complete observations at the bed-side, in order that he might make the clinician as ridiculous as possible before the profession, and gain the credit of superior observation. He will reply that he sought his knowledge in the "history book," but the history was the record of a young doctor who had been but a few weeks on service, and Dr. B. was expressly informed that it was imperfect; not all that I had observed and dictated was put down.

"Now, finding that I could no longer have a joint service with Dr. B. without a vast amount of annoyance, I addressed him a note, and requested him, on account of our unpleasant relations, to unite with me, in a quiet way, to separate our service, in order that

I might have the services of Dr. Carson as pathologist. He refused peremptorily, and in a line.

"I then appealed to the Board to grant a general rule which would give the liberty of choice to members of the staff. It was justly granted, and since that time Dr. Bartholow has not been called upon to make autopsies. He says, in regard to this resolution, *that with one blow it destroyed the independence of his department*; thus more than intimating that Carson and Taylor would act in subserviency to the clinicians rather than 'in the interest of science and the poor patient.'

"But did this resolution, in fact, limit Doctor Bartholow's opportunity for exposing the malpractice in the wards any more than formerly? Not at all, for he lectured on the specimens as before, and two of my cases of brain tumor, he tells the world, in the *Enquirer*, and the profession, through the medical journals, he "lectured upon before the class, and pointed out my errors in diagnosis." So, then, his moral courage had an ample, unlimited field for asserting itself. Indeed, he frequently remarked that, by being relieved from *post-mortem* examinations, he was saved the loss of precious time and a deal of dirty work. Moreover, it is not the practice of eminent teachers of pathology in Europe to make these examinations in person; they only do what Dr. B. did, viz: lecture on the products of the *post-mortem*. If the aim had been to destroy Dr. B.'s privileges, he would have been denied both the autopsy and the lecture.

"What then was the gain to the practitioner by the rule? Simply this, that, while we had not the slightest desire to restrain the exposition of any mistakes in our bed-side opinion, because none can be more anxious than a practitioner for these corrections or confirmations, we were not willing to be injured by an unscrupulous man, who was not working in the interest of science, but of personal revenge; so, we wanted a reliable *post-mortem*.

"His capacity for malversation in his treatment of the Board and the staff since his dismissal, I shall presently show. Now, to end this part of my subject, let me ask, would the officers of a bank, or a county treasury, or any public institution of trust, allow a notoriously unfair, if not dishonest, man to be an examiner of its valuables or papers?—a man who would willingly alter figures, or conceal or cancel papers, or misrepresent them for his purposes of malice and revenge? Certainly not. They might submit for a time, provided he could be accompanied and watched; but would

the courts, or appointing power, continue such a character long in place? It is not probable. Now, that is the bad position which Roberts Bartholow has held to the staff, and that is one main reason, I suppose, among others, which has led the Board to 'relieve him,' as they gently said, 'from duty.' Can any intelligent reader now think that Dr. Bartholow was dropped because he was exposing errors, as he assumes? Is it not plain that he was dropped for other reasons?"

*Of the Trustees* we can speak with great earnestness. They are amongst the most upright and intelligent men of the city. They have given to the Hospital a vast amount of painstaking and persistent attention. It is safe to say that the friends of the institution would find it extremely difficult to replace the present Board with gentlemen who would bring to their trust so much practical good sense and discretion, but somewhat more in detail let us note the *results* of the management, especially upon points that have received the unfriendly criticism of certain persons.

*The Cost of the Management.* It is difficult to compare the hospitals of the country because of the different accommodations in different cities. In Philadelphia there are two great public hospitals besides church ones. So in New York, St. Louis, etc., Besides, in some of these cities, there are numerous dispensary arrangements, so that a careful study of the Cincinnati Hospital statistics and tables shows that in relation to the character of the cases received in its wards, it is about the same as all the general hospitals of the world, and a comparison exhibits that the success of treatment in our hospital is behind none, and that the percentage of expense is not in advance. Attempts have been made to reflect upon the Board by vague charges of extravagance in the use and cost of the liquors purchased. A reference to the reports shows that the average cost of all the liquors is just seventy-five cents per annum for each inmate. There are few, if any, hospitals that can show a smaller figure. Had we space to spare, we could elaborate the details of these tables in regard to mortality and expenses, abundantly sustaining our general statement.

*Of the Staff.* No medical men of our city have a stronger hold upon the confidence of the general profession here than the fourteen men who constitute the surgical, medical, obstetrical, ophthalmological and pathological staff of the City Hospital. They would



take this rank in any of the great cities of this country, and the published efforts of parties here to deny to the staff this meed of professional capacity is simply an outrage. We do not claim for these men all the professional ability of the city by any means, but in all the labors of clinical attendants and teachers they fulfill their duties. We may allude to Prof. Comegys especially, as his capacity has been singled out so mercilessly. He has certainly and particularly distinguished himself as a clinical lecturer during the past two winters, and some of his blackboard delineations which we have heard, we regard as equal to any clinics we ever listened to. We might speak with like praise of several other members of the staff who are uniformly listened to with eager attention. No city has more instructive clinicians than Dr. Wm. H. Taylor, and Dr. Wm. Carson; Wright & Blackman, Mendenhall, Mussey, Davis, Dawson, Murphy, Williams, Kearney, White and Seeley are all too well known to require further compliment.

In this connection it is right to say that we think all of these men do themselves and the profession great injustice in writing so little of their experience for publication, and yet, many of these gentlemen have written well, and attracted attention both at home and abroad by their writings. Foreign reviews and standard text books of this country quote several of these and other gentlemen of Cincinnati as recognized authority, notwithstanding they have made no attempt to court this kind of notoriety.

Finally, we have a word to say about *concours*. The internes of the Hospital are selected on this plan, and, as we think, properly. The staff is *not* thus selected. We know of no staff in the world thus selected. *We do not think they ought to be. It is no safe test.* There are some important qualifications of a member of staff that could be decided by *concours*, but others quite as important—manner, fidelity, experience, honor, are qualities quite as valuable to a hospital as mere technical knowledge of scientific details; without them a member is worse than useless, he is offensive. We should as soon select a general for our armies by *concours*, or a president, or our family physician. So, all the twaddle that has been so urgently written up these few weeks about “nepotism” and “toadyism,” to be regulated by a resort to the *concours* is simply nonsense, not worthy of respectable journalism, or scarcely the sources from which it emanates.

**Medical Classes.**—The position of this journal in regard to medical education is well understood. We believe students of

medicine by earnest application may acquire a good practical knowledge of their profession under the present system and plans and facilities. Good men in the past have done so without an approach to the present advantages afforded by our colleges. Still we hope for yet better things in the future that will secure more thoroughness, more system, more completeness, not of the few, but of the great mass of medical practitioners. This is bound to come in time despite all carpers and all malign influences.

In Cincinnati the classes of our schools make up more than the usual aggregate at the opening season of lectures.

The introductory at the Medical College of "Ohio" was given by Prof. Bartholow. The class is considerably less than last year.

No introductory was announced at the "Cincinnati" College of Medicine; the class thus far numbers about 35.

At the "Miami" Prof. Stevens gave the introductory; it was chiefly devoted to a discussion of the "certainties and uncertainties of medicine," with a response to the skepticism of men like Holmes who doubt all value in the art. The class numbers about fifty per cent. in advance of last year, leading thus far very decidedly all the classes of the city. This result is doubtless owing in part to the vicious and unwarranted attacks that have been made upon the faculty during the summer and fall in certain directions; but also showing that permanent success can not fail to those who persistently attend to their own affairs and respect the duties and position of their neighbors.

*Nearly a Close.*—The year is nearly gone: one more number will complete the work; and yet there are many subscribers in arrears; we trust that they will see the propriety of remitting *at once* while they think of it. We urge attention to this matter just now, because we are engaged in making up a new mail book, and especially desire to enter upon a new year with clean accounts, which also reminds us to remind subscribers that in the process of copying, mistakes and omissions may occur; if thereby any of our subscribers fail to receive the journal, they will oblige us by an early advice.

*Vick's Illustrated Flower and Bulb Catalogue for 1871* is just the thing for floriculturalists. All our lady friends should write to Mr. Vick of Rochester, N. Y., and get a copy and learn what bulbs and seeds they need for next spring's work.

*The Academy of Medicine* has resumed its sessions each Monday evening, and we begin to have reports for our pages. We hope to add materially to the value of the journal during the next six months by excerpts and papers from this source.

*The Albany Medical College.*—We have received several daily papers from the city of Albany, giving accounts of the opening of the school, and serious changes of a visible admixture of the school with homeopathy. In some of our medical exchanges we have seen similar statements, as also intimations of a disruption of the Faculty on account of these discreditable complications. We are pleased to see from statements by the authorities of the collège that there is no truth in the charges. Hon. Mr. Harris is one of the Law Faculty and the medical class listen to his lectures on medical jurisprudence. He is not properly connected with the Medical Faculty; and it is now denied that even he has any affinities with homeopathy. This school has occupied an honorable position in the past, and we are glad to see so positive a denial of these charges.

*Death from Chloroform.*—A female patient died recently in the operating amphitheater of the Cincinnati Hospital from the effects of chloroform. The patient had been placed on the table for amputation of the foot by Dr. Dawson. A small quantity of chloroform only was used, and the patient expired almost immediately after the completion of the operation. A *post-mortem* examination revealed fatty degeneration of the heart. Dr. Dawson will prepare a full report of the case at an early date.

*The Magazines.*—The time approaches when our friends select their family reading for a new year. *Harper's Monthly* has just completed a volume, beginning its year with December. Now is, therefore, a good time to commence a subscription to this capital magazine. The *Ladies' Repository*, published by the Methodist Book Concern of this city, and the *Golden Hours*, the new magazine for children, are each in their way models, and come up to our idea of a pure Christian literature.

*The Visiting List for 1871.*—Lindsay & Blakiston have laid us under obligation by placing a copy of this indispensable on our table, thus early. The price is slightly reduced, running from \$1.25 to \$3.00.



## Selections.

*Cremation of the Dead.*—The question of burning the bodies of the dead on the field of battle, is discussed by the French medical journals with a good deal of earnestness. The *Gazette Hebdomadaire* opposes it on the ground that it would be more difficult of accomplishment in the midst of a campaign, than the burial in large ditches, and that the emanation would be far from innoxious. The editor refers to the Roman custom of cremation, as designed to prevent the violation of the grave, and also to revive, as it were, in his ashes, in the bosom of the family, him who had been its honor and its joy. Cremation thus became an aristocratic mode of sepulture, whilst burial was reserved for the poor and wretched, who were often thrown in the ditches.

*Supposed Noxious Effect of Fruit.*—Every summer, when complaints of the bowels set in, just as the season for fruit commences, many people, and not a few physicians, are wont to exclaim—"So much for fruit!" We are glad to see that Dr. Snow, the indefatigable Health Officer of Providence, R. I., takes pains to correct this prevailing error. The great mortality in the fruit season is among children too young to eat fruit. Both common sense and statistics go to prove that a reasonable proportion of sound and mature fruit and vegetables, conduces to health and not to sickness.

Since the above was written, the monthly health report of Dr. Logan (q. v.), has come to hand, enforcing the same estimate of the relation of fruit to health.

*Gonorrhea.*—Prof. W. A. HAMMOND, in his "Lectures on Venereal Diseases," asserts his belief, which he supports by cases, that gonorrhea may be introduced either by the virus of hard chancre, or by the virus of soft chancre, when the chancrous matter has been deposited for a certain length of time upon the mucous surface, without any abrasion being present, or without any chancre following. Vaginitis and urethritis may be induced by other causes, but true gonorrhea owes its origin to the contagion of chan-

crous pus alone. He also believes that the gonorrhea induced by the matter of a hard chancre will be followed by and may impart constitutional syphilis, just as if a chancre had been present. Dr. Hammond's opinions in this respect coincide with those of Hunter. The experiment of Ricord appeared to have finally decided the question that gonorrhea was incapable of producing syphilis, and that they were totally different disorders. But the conclusions arrived at by Dr. Hammond are:

"1st. That the virus of an infecting chancre, when deposited on a secreting mucous surface upon which there is no solution of continuity, may give rise to gonorrhea unattended by chancre, but which is syphilitic in its character, and capable of producing constitutional disease.

"2nd. The matter of such a gonorrhea is capable of causing an infecting chancre, either by natural or artificial inoculation, which chancre is followed by constitutional syphilis."

Similar propositions are made about soft sores.

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As another instance of the average newspaper idea of surgical procedures, a religious journal of this city quotes from the *Ayrshire Advertiser* an account of an Edinburgh banker who got a large copper coin impacted in his gullet, whence it was removed by the late Professor Syme, who "cut the patient across the breast, with two considerable incisions downward, bent down the breast, laying open the whole upper interior, found and cut out the coin, and sewed all up again. A month afterward the poor man was able to walk to the professor's consulting room, to thank him for his life."

We have met many persons who were willing to make solemn affidavit that they had in their own persons had their eyes "taken out and scraped and put back again" for the relief of strabismus, and one patient recently asseverated that he had seen his own eye in a basin; but turning down the entire thorax to get at the lower part of the œsophagus is a still more remarkable performance.

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DR. N. G. ORDWAY, of Portland, Maine, who was sued for malpractice in the matter of an operation performed upon a patient's hand, has received a verdict in his favor on the singular defence, as reported by a local paper, "that the ether used in the operation affected the physician so that he was unconscious of what he did."

## Reviews and Notices.

***Practical Anatomy.***—A Manual of Dissections. By CHRISTOPHER HEATH, F. R. C. S., etc., etc. First American from the Second English Edition. Edited, with additions, by W. W. KEEN, M. D. Philadelphia: Henry C. Lea, 1870.

The Dissector of Mr. Heath is a very satisfactory guide to the student of practical anatomy, and the very elegant shape afforded by Mr. Lea, the American publisher, must make it very acceptable, indeed. The paper and typography are faultless—unusually good, we should say, and the numerous wood-cut illustrations are clear and beautiful; some of them, particularly the sectional views of structures, appear very good and well suited to fix the relation of parts upon the understanding of the beginner. For sale by Robert Clarke & Co. Sheep, \$4.00; cloth, \$3.50.

***A Hand-Book of Microscopy.***—By JOSEPH G. RICHARDSON, M. D., Microscopist to the Pennsylvania Hospital. Philadelphia: J. B. Lippincott & Co., 1871.

One of the chief obstacles in the way of general practitioners resorting to the frequent use of the microscope in the study of bedside cases, has grown out of the complication authors have generally thrown about the subject of microscopic manipulations. It seems to us that the little manual of Dr. Richardson has very materially simplified the subject, and its study would enable almost any person to enjoy the pleasures of microscopy, even in the midst of hurried practice.

Of the microscope our author prefers what is known as the "Woodward," and made by Messrs. Queen, as adapted to the wants of ordinary observers, being satisfactory in results and moderate in price.

Besides detailing the construction and working of the microscope, we find chapters on the examination of the urine, pus, saliva, milk, blood, various secretions and discharges. These chapters are illustrated with very good wood cuts, showing the microscopic views of blood corpuscles, cells, crystals, etc.

There are also suggestions in regard to medico-legal investiga-



tions—examination of blood stains, and examination of morbid growths. Take it altogether we are greatly pleased with the work. For sale by Robert Clarke & Co. Price \$2.25.

***The Ohio State Medical Society:*** Transactions for 1870. The volume of proceedings and papers pertaining to the Twenty-Fifth Annual Meeting, held in Cleveland, June 14, 15 and 16, has come to hand. It is somewhat more bulky than any of its recent predecessors, and to many of the members will commend itself on account of its appearance with a substantial cloth binding. The appearance in other respects may be simply acceptable, but not by any means perfect. The typography is moderately good, and the proof-reading decidedly unfortunate.

There is quite an attractive table of contents—The President's Address; Surgical applications of Carbolic Acid, by Dr. Conner; Climatology, etc., of south-east Kansas, by Dr. Beeman; The Anatomy law; Historical Review of the Society for twenty-five Years, by Dr. Stevens; Hematics, by Dr. Hyatt; Vaccination, by Dr. W. B. Davis; Pneumonia, by Dr. Selden; Prevailing Diseases, Dr. Black; Nervous Diseases, Dr. Conklin; Cantharism, Dr. McBride; Obituaries, Dr. Stevens; A Poem, by Dr. Brown. Appended to this volume is the Code of Ethics, and a revised list of the membership. As is generally known, the Society adjourned to meet in Cincinnati in 1871. Dr. Thad. A. Reany is President-elect.

***The Archives of Science,*** is the title of a new publication, issued quarterly at Newport, Vt. We have received the first number, containing a considerable amount of matter, partly historical and partly scientific. It is intended for the publication of the proceedings of the Orleans County, (Vt.) Society of Natural Sciences, and will be its organ of communication. We wish the enterprise success.

***The Elements of Natural Philosophy.***—By SIDNEY A. NORTON, A. M. Three hundred and fifty illustrations. Cincinnati, Wilson, Hinkle & Co.

This volume has been prepared by Prof. Norton as a school textbook. No one in our knowledge is better fitted for the task than the author, who has been engaged in teaching physics for many years. The simplicity of arrangement and expression will commend the work to teachers and students. The publishers de-

serve great credit for the beauty of the mechanical execution exhibited. In typography, in the paper, in the remarkably excellent wood cuts, we consider Prof. Norton's book a decided credit to our city; and while it is intended for the young student, older heads will find in it much to refresh their knowledge of the science.

***A Treatise on Physiology and Hygiene.***—For educational institutions and general readers. Fully illustrated. By JOSEPH HUTCHINSON, M. D. New York, Clark & Maynard, 1870.

This is another contribution to the educational books of the country; and from a moderate examination of it, will prove satisfactory for its purpose. Dr. Hutchinson, the author, is a well known and prominent physician of Brooklyn, and, having given his attention to this subject, will doubtless be found to have prepared an excellent work. The arrangement is good, the mechanical execution is good, the illustrations are satisfactory; hence, the book can scarcely fail to be accepted as fitting its proper place.

***The Physician's Prescription Record.***—Dr. Butler, of the *Medical and Surgical Reporter* of Philadelphia, has issued a book of prescription blanks, nearly four hundred in each volume, devised on a plan of some ingenuity. At the top of each blank are lines for date, name, disease, general symptoms, etc. Then follows a space for the regular prescription, "punched" around like a postage stamp, so as to be easily detached from the book, and still below this, space for a copy. The plan enables the physician to retain a record of his cases and treatment, easy of reference at any time, and, it seems to us, would be very convenient, especially for office practice.

***Married.***—BROWN—HUNTING. On Wednesday evening, October 5, at the residence of the bride's parents, by the Rev. M. C. Briggs, D. D., W. T. Brown, M. D., and Miss S. Addie Hunting.

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THE CINCINNATI  
LANCET AND OBSERVER.

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E. B. STEVENS, Editor.

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Original Communications.

*Art. 1.—Clinical Experiences from Private Practice.—Case of  
Acute Rheumatism.*

By Z. C. McELROY, M. D., Zanesville, Ohio.

April 12, 1870. Mrs. M., age, 35; weight, 155; well cared for in every respect. Has had rheumatism four times previously; duration from six to twelve months. Twelve o'clock, temp.  $106\frac{1}{2}$ ; pulse, 120; right hand swollen; both feet very painful; lays on a lounge, and is moved with the utmost difficulty, and with much pain. Has been sick for several days, and thought she had only taken a cold, and would soon be well. Thinks physicians are not of much use in rheumatism, because, apparently, they were unable to control or cure it, and had concluded she would not have one. Her son summoned me to her assistance, and she is now willing to be treated. The temperature indicates a velocity of molecular changes that will soon dash some of her organic forms to pieces,



and the indication is, therefore, to retard it, and bring about active elimination. For this purpose she is to have half a teaspoonful tinct. ver. viride in a wineglass of water, at one dose, immediately; a tablespoonful bicarb. potassa in quart of water, to be used as a drink, and to be drank, if possible, before bedtime.

7 P. M. Temp. 104. Has been made very sick at the stomach, and vomited very freely. The main indication is now to obtain a night's sleep. She is to have a tablespoonful of a mixture every hour till she sleeps, of chloral, three drachms, and menstruum, four ounces. Is now propped up in bed, and comparatively comfortable.

13th, 8 A. M. Threw up first dose of chloral given last night, but it was repeated in an hour, and she has slept some, but not sound, or refreshing. A caution by the druggist who put up the prescriptions in regard to both the veratrum and chloral, alarmed them, and prevented them following directions in regard to chloral. Temp. 101; pulse, 102. Is still very sore; hands and feet in much the same condition as last evening. Popliteal spaces very tender; has eaten some breakfast. Is to have, this morning, two table-spoonsful epsom salts in a pint of water, to be drank this forenoon; the tender parts to be rubbed with naked hands, hot water and fine soap, rubbing the effusion upward into the general circulation; to have of the bicarbonate potassa solution as much as she will drink. The purpose of the solution of epsom salts is to give exit to the results of yesterday's tissue metamorphosis, and of the potassa to promote motion in the interest of waste and elimination.

7 P. M. The bowels have not moved; left hand getting sore; she has been propped up very high in bed up to this time. She is now placed level, with a piece of brown muslin, six yards long, spread across the bed, under her shoulders and chest, the ends pushed under the bed, the purpose of which is to raise her up and lay her down in bed, and to sustain her in the upright position while taking food or drink. Two persons can thus elevate her, and by securing the ends of the muslin to the foot of the bed, she is easily and comfortably supported. She thinks she is much easier level. Temp. 103½; pulse, 108. Has taken domestic ice, cream, and other food. She is to have more salines to move her bowels, and when moved, to take the chloral, a tablespoonful every two hours till she sleeps.

14th, 8 o'clock A. M. Complains of being very stupid; bowels

have moved freely, and has passed urine freely; is composed and cheerful. Temp. 102.60; respirations, 36; pulse, 102. Hips quite uneasy, but better; left hand very tender; has eaten some breakfast. Is to have bicarb. potassa and lemon juice, all she will take; ice, and all the good, substantial food she will eat; but no toast at any time, for the reason that it gives rise to flatulency, the burned portions of it undergoing fermentation, instead of digestion.

5 o'clock p. m. Has slept short naps many times during the day. Temp. 103½; respirations, 30; pulse, 114. Bowels have been moved several times, but little each time; feet improved; hands still very tender; has some headache; complains of thirst; tongue heavily coated, and has eaten tolerably well. Is to have chloral sufficient to procure a tranquil night's sleep.

15th, morning. Bowels have moved freely, has passed urine freely, and both are very offensive. Had some passive delirium last night; had about a drachm of chloral, and several good naps; called for her breakfast at 5 A. M. Temp., 101½; respirations, 30; pulse, 108. Is to have bicarb. potass., lemon juice, and food to-day.

Evening. Bowels moved again in the forenoon; passes urine, very high colored; has taken her supper with relish, and eaten a good meal. Temp., 103.70; pulse, 116; respirations, 34. Hips better decidedly. No new pains, and has no complaints to make. Weather bad, and prospects of rain and storm.

16th, morning. Has slept better and is cheerful this morning; little or no pain; took about a drachm of chloral last night. Called for breakfast at five o'clock this morning; temp., 102½; pulse, 104; respirations, 30; does not pass so much water, nor has the bowels moved. Is to have salines and food to-day, with hot water, and frictions with naked hands, and toilet soap to hands and feet. She thinks this is very pleasant, much more so than the liniments she had to use on former occasions.

5 p. m. Bowels have moved freely, as well as urine, and both smell very offensive. Has no particular pain; hand still swollen; feet better; temp., 104.10; respirations, 24; pulse, 108; pupils somewhat dilated; is cheerful; has eaten well and sufficiently; tongue heavily coated and moist; taste good; decubitus dorsal. Is to have chloral to-night.

17th, 8 o'clock, A. M. Was at home for the first time last night; that is, had no delirium, and felt that she was at home. Slept

well, and feels refreshed this morning. Has had two breakfasts, one at 4½ and the other at 7 o'clock. Food tastes well, has heretofore been bothered with much spittle in her mouth, which is absent this morning; pulse, 108; temp., 102½; respirations, 32; passed urine freely during the night, and the bowels have moved this morning, and both are much less offensive; hand considerably swollen. Is to have salines and food to-day. May sit up and have bed changed—that is, a totally different bed—everything she has used to be removed from the room.

Evening. Has been drowsy to-day; feels not quite so well perhaps; weather very dull, rain, and shine, and cold, and disagreeable; temp., 104; pulse, 108; respirations, 30; bowels have not moved, but has passed urine freely. Hands perhaps a little more painful than yesterday; feet much better. To have salines and chloral to-night.

18th, 8 A. M. Has slept very sweetly last night. Had to have her husband called at 4 o'clock to tell him how good she had slept, and what good nurses she had had during the night. Called for bread and milk and eat it with relish; bowels have moved freely and do not smell so fetid. Feet improving; hand still swollen, but suffers no acute pain; the weather still very bad, raining all night, though not very cold. Temp., 103.20; pulse, 108; respirations, 36. To have salines and food.

Evening, 4½. Has felt well to-day. Temp., 105; circulation, 100; respirations, 40. Thought she felt some uneasiness about the heart to-day. To have half a teaspoonful tinct. ver. viride at one dose, and at once, and it was given.

8 o'clock, P. M. Pulse, 90; Temp. 103. Has vomited freely and says she feels so good. Has, however, a little uneasiness about the stomach, which was relieved by a tablespoonful of spirits. To have food, water and sleep by chloral, if necessary.

19th, 8 o'clock, A. M. Rested well last night; feels entirely free from suffering and had an early breakfast. Temp., 100.40; respirations, 20; pulse, 84. Bowels have moved, and has passed urine freely. Feels altogether better. The only noticeable thing is some irregularity in the heart's action; it is not regularly irregular, but gives a few wavering beats, and then a few full strong throes. To have to-day, teaspoonful elix. valer. ammonia, and a three grain quinia pill, every three hours.

The mental conceptions behind this sudden change in the remedial, or rather therapeutic management of the case, were founded



on function being the expression or language of structure. Function is structure speaking. Function depends on the form of the structure, for the eye and the foot are made of the same ultimate materials. The difference in their functions depends, at last, on their forms. The gold of which the pen is composed, which traces the words in manuscript from which this article is printed, has the requisite form to perform its function—a pen. The same material—gold—as the frame of a pair of spectacles, has a different function to perform, and its capacity to perform its function lies in its form. Function, then, is truly the language of form. In this lady's case the treatment thus far has been to waste as rapidly as safety to her life would permit, the tissues, whose changed language was the unerring index that a change of form laid behind it. She was allowed the liberal diet she had eaten with the view to reconstruct in natural form the tissues whose functions had been lost. The swelling of the hands and feet, the pain mechanically moving them gave her, could indicate nothing else to the scientific eye and mind than change of form. The language of this lady's heart told me plainly by its irregular throes that its structure was wasting more rapidly than its repair; and, hence, the wasting and elimination must be retarded, and its reconstruction in normal form promoted. And for this purpose the ammonia and quinia were selected. Perhaps they were not the best but they were the remedial agents used. Perhaps the veratrum had something to do with its irregularity, for its regularity or irregularity depended in part on the nerve masses with which it is connected, and the decay of these were probably not regular, and hence the ammonia, one of the few remedial agents in the whole materia medica whose *modus operandi* is correctly represented to the mind by the term "stimulant," if that means to urge or goad on, was given. Ammonia is a volatile alkali, having a high rate of motion in chemical changes, whose mission in the living body is to promote the waste or decay of tissue; and this is the inexorable condition for the evolution of so-called "vital force;" but this so-called vital force is in no wise different from force evolved out of a living body by chemical means; and as molecular motion in organized bodies, or atomic motion in inorganic, are alike connected with every manifestation of force in the physical or organic worlds, changes of matter lie behind them all. This lady's heart did not act regularly. Its function was changed. Function is structure speaking. Therefore the changes of matter were not proceeding regularly,

and to promote them the ammonia was selected and given. The quinia for the reason that it is the most potential force in the materia medica in aiding in the formation of normal tissue; and in that way, and that way alone, can it interrupt the phenomena of so-called periodical fevers. Function is form, or structure, speaking. In periodic, as well as all other so-called fevers, function indicates that the molecular forms of the tissues have been modified so as no longer to give rise to normal function, force or life phenomena. Quinia interrupts the abnormal phenomena, therefore, promotes the formation of normal molecular forms of tissue.

20th, evening. Has rested well all day; hand not much swollen, and has had no pain, at any time, to-day. Has had food, and enjoyed it; asks for tomatoes, and can have them. Temp. 102. Respirations, 24. Pulse, 114, still irregular, though better than in the morning. Is to have ammonia and quinine to-night; and, in addition, to have flaxseed poultice over the chest, at bed time.

21st, morning. Has rested tolerably well. Looks and feels better. Heart's action very steady and regular. Has passed urine freely, and has eaten a good breakfast, and enjoyed it. Skin nearly natural color; tongue clean and good color. Pupils entirely natural, for the first time, probably, since her illness. Temp. 100.80. Respirations, 24. Pulse, 102. Is to have to-day two drachms valerianate ammonia and six grains quinine, every six hours. May sit up in her chair, if she desires to do so. Hands feel and look quite natural. Has no rheumatism.

Evening. Has had little or no pain or uneasiness, to-day. What little she has, is in her back. Bowels have moved, and has passed water freely. Eats her food with relish, and it tastes well. Pulse, somewhat irregular, 108. Respirations, 34. Temp. 103. Has slept a good deal, to-day, which has been very fine. Continue ammonia and quinine, and apply poultice to her chest again.

22d, morning. Has rested quite well, perhaps her best night. Is sitting up in easy chair. Has passed water freely, and bowels have moved, with relief from some uneasiness in them, during most of the night. Has had breakfast: no pain. One hand a little more swollen and stiffer than yesterday. She is now quite sallow. Temp. 102.60. Respirations, 24. Pulse, 108, and somewhat tremulous and irregular. Is to have ammonia, but no quinia to-day, as yesterday.

Evening. Has had a very good day. Has walked about the room some, with a little aid. Has eaten heartily of chicken, bread

and butter, peaches and milk, and enjoyed them greatly. Skin moist and soft, and color much better than in the morning. Temp. 102.70. Respirations, 20. Pulse, 108, full and regular. Pupils, natural. To have valerianate ammonia, two teaspoonsful every six hours.

23d. morning. Has slept a good deal last night, though naps were short. Hands pain her some, and are somewhat swollen. No pain anywhere else. Is not up this morning. Pulse, 90, full, soft and regular. Respirations, 18. Temp. 100. Tongue, but slightly furred; pupils, natural. Weather, greatly changed for the worse. She says she feels a little cross, and it would not take much to get her to scold somebody to-day. Is to have valerianate of ammonia to-day, and all the food she wants.

Evening. Has had a comfortable day. Slept a good deal; has enjoyed her food. Hands, somewhat swollen, but little or no pain in them, or anywhere else. Pulse, 96. Temp. 103. Respirations, 18. To have her hands well rubbed to-day, with hot water and toilet soap. At midnight, to have six grains quinine and a like dose at 6 o'clock in the morning, and the ammonia.

24th, morning. Has slept well last night, and had her breakfast, and enjoyed it. Is sitting in her easy chair, and looks, and says she feels as if she was somebody. Hands a little puffy, feel stiff and itchy, but no pain. Pulse, 90. Temp. 102½. Respirations, 20. To have one three-grain quinia pill, after each meal, to-day.

Evening. Has had a good day. Has sat up almost all day, and walked across the room, with a little help. Temp. 103. Respirations, 24. Pulse, 100. To have valerianate of ammonia, to-night.

Considering the case substantially convalescent, accurate daily, or semi-daily records of temperature, circulation, and respirations were discontinued.

On the 29th, the temperature had run up to 105, and she was restless and uneasy, and had a half teaspoonful *veratrum viride*, in the afternoon, with the effect of bringing it down to 100 late in the evening, followed by a good night.

During the next two weeks, her progress was very regular, the temperature occasionally down to 99 in the morning, and rising to 101 to 102½ in the evening. Her appetite remained good; and there was a steady increase in her ability to move about. Not resting so well after the 29th, Dover's powder was given in ten-grain doses, at night; and the quinine continued, three grains after each meal.



At the close of the sixth week, her right arm had not regained motion, and, though going about the house, she could not put up her hair, nor her hand to the back of her head. Considering that some adhesions had taken place, they were broken up at four sittings, two days apart, under a current of magneto-electricity. At the end of two months, she had regained a higher degree of physical vigor than she had enjoyed for a number of years, and has had no sickness, or return of rheumatic pains, up to this writing (Nov. 10, 1870), having been seen on the 8th. The precise time the temperature declined to, and remained at, the natural standard, was not ascertained. It was still from one to two degrees above at last ascertaining, near the close of the eighth week. But, as everything else was so nearly natural, the processes of repair fully active, it was not deemed of any consequence that it remained so.

At no time during the progress of the case did any mental conceptions ordinarily connected with the term rheumatism enter into the consideration of the case. The fever, so called, in fact, the increased molecular motion, as evidenced by the thermometer, was regarded as salutary and beneficent in its purposes and results. It was regarded so because tissue out of normal molecular form had been accumulated in her body as the result, most likely, of the variable action of the physical forces; the past winter having been very mild and open, the range of temperature very variable, with a large rain fall, and but little snow or settled weather. The transitions of temperature had been so sudden and so frequent that on one occasion, from a mild spring atmosphere and temperature in February, ice from four to six inches thick was formed in sixty hours. The patient is a large woman, of full habit, and necessarily confined in doors most of the time. Through these causes, and perhaps others, but all physical, she had accumulated tissue, which by its oxidation or decay could not and did not evolve the normal phenomena of life. That this was so is evidenced by the great fundamental truth that function is the language of structure. The fever, or accelerated molecular motion, was regarded as necessary to oxidize and remove it. Had the accumulation gone on sufficiently, she would probably have had a sudden algid shock, without perfect reaction, lasting from ten to sixty hours, and terminating in death to be explained as a case of sinking chill, or pernicious, remittent, or bilious fever.

But the progress of the case was otherwise. When first seen,

the temperature of  $106\frac{1}{2}$  was interpreted as the evidence that the results of tissue metamorphosis were retained in the body; and that molecular motion was proceeding at velocity altogether unsafe either for the life of the patient, or the preservation of the molecular forms of her body. The *veratrum viride* was prescribed in half teaspoonful doses, not because it was a good remedy in acute inflammatory rheumatism, but because its effects would or most likely be, first, to retard the velocity of molecular changes; and, secondly, succeeded by vomiting, possibly by purging and sweating, which would pass out of the body, the retained results of tissue metamorphosis, which ends were attained, and to the extent desired. It was given in half teaspoonful doses, because its mode of operation is to retard molecular motion (or chemical changes), with active elimination, but without changing the molecular forms of the tissues, the precise conditions, and the sure guarantee that even in still larger doses no life will be lost from its effects in the future, as none appear on the records of the past. And for the additional reason that in the court of last resort in therapeutical matters, experience, it had been found safer and better to give one decisive dose than to attempt to control motion by smaller, and not expel the results of tissue decay from the body, repeating it only as required to effect those ends. The bicarbonate potassa, epsom salts and lemon juice, were, in like manner, prescribed, not because they were good in inflammatory rheumatism, but because they facilitated the molecular disintegration of tissue, and the exit of its results from the body by the bladder, bowels, skin and lungs. The chloral was not prescribed with the mental conception that it was a valuable hypnotic, or anæsthetic, or a good remedy in rheumatism, but because it was regarded as an agent which retarded molecular motion or changes; and as it is decomposed in the body, its chlorine would not be idle in rendering the results of tissue decay harmless. And all these expectations were realized, and realized not because either or any of the remedies used were supposed to be, or had been found in the hands of others, good for acute or inflammatory rheumatism; but because they fulfilled the real indications of remedial management presented by the case, viz: promoting the disintegration by the oxidizing process of spoiled tissue, and the exit of the results of tissue changes out of the body. Function pointed unmistakably to changes of form in the tissues, for they did not yield by oxidation the normal phenomena of life, or function.

In like manner, all the good, plain substantial food she would take, as milk, bread, butter, chicken, fish, and occasionally steak, were allowed, and indeed required to be taken, because they were necessary, and designed to furnish the materials to reconstruct in normal molecular forms the wasting tissues of abnormal forms. The feet, hands, and shoulders, the seat of the principal, and more obvious localized phenomena, were regarded, not as in the clutches of a mysterious rheumatism, existing to torture my patient, but as evidence that with the increased molecular changes, there was retarded physical motion of the fluids; and hence the swelling and pain. They were not rubbed with any liniment or lotion which had apparently cured somebody else of rheumatism, but were bathed frequently in very hot water, with soap as a lubricator; the fluids mechanically detained were, as far as possible, passed into the general circulation, and with much comfort to the sufferer. Her person was kept scrupulously clean; bed and bedding changed twice a week, and her personal apparel whenever it presented any soiled or mussed appearance. Her tongue was cleaned by scraping with a fruit-knife each morning.

At no time was there any doubt or hesitation about the proper management of the case, from the beginning to its termination. During the first five nights she took five drachms of chloral. None was taken during the day, and it was laid aside as not necessary at the end of the first week. Though very helpless, and having to be moved frequently, she suffered but little pain after the first twenty-four hours of treatment. The remarkable feature of the case, was the steady elevation of temperature for nearly two months. But as motion in the interest of repair was equally active the processes of waste and repair were evenly balanced, and when the defective tissue had all, or mainly all, been removed, and replaced by that which evolved normal function by its decay, her recovery was complete, or as complete as it is possible for any human being to recover from her situation at the commencement of the treatment. If any merit is due to me in the management of the case, it arises from the fact that it was managed from beginning to end, with nearly as much certainty, and with as correct mental conceptions, as are employed by mechanical engineers in our own times.



*Art. II.—Claude Bernard's "Leçons sur les propriétés des tissus vivants."\**

Translated by J. S. MOREL, M. D.

LECTURE XIII.

MUSCULAR JUICE—CADAVERIC RIGIDITY.

*Summary.*—Muscular juice—The variations—Alkaline in its normal state, it becomes acid when the muscle is fatigued—Moral influences traced back to physical influences—Quantity of heat used up in muscular contraction—Cadaveric rigidity—Degree and variation of this phenomenon—Its cause—Coagulation of syntonine and production of lactic acids—Instantaneous production of cadaveric rigidity under certain circumstances—Mechanism of the death of animals placed in a very warm medium.

The phenomena of respiration which we have just analyzed, are not the only chemical phenomena which take place in the muscles; for example, there are substances which disappear during contraction, and substances are found in the muscle peculiar to it, are met with nowhere else, and appear necessary to its action. Thus the muscular juice, which is found in all muscles, is an alkaline substance containing free oxygen, creatine, and creatinine, substances analogous to urea, and derived from the decomposition of nitrogenous compounds. But the muscles form nineteen-twentieth of the whole volume of the human body; this observation alone shows the great importance of gymnastic exercises, which changes the composition of the blood, which then reacts upon the rest of the organism. To a certain point we may soon say that moral influences in their origin are only physical influences; for joy, sadness and the other modifications or impressions which ordinarily are considered as moral influences, alter the composition of the blood in various ways, and it is exclusively by this intermedium that they can act upon the organism.

We have already spoken of animal heat, and shown that it was produced by a combustion that goes on everywhere, but to a greater extent in the muscles and not in the lungs, as taught by Lavoisier. But works have been recently published which give us most extensive information and analysis of the physical phenomena of the muscular system. The tendency to-day is to simplify everything relating to science, to trace its agents from one to the other, and to seize the real unity although concealed in phenomena, the most varied in appearance. It is thus that some have found

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\*The volume will contain 422 pages, divided into 25 lectures, 78 wood-cuts.

a resemblance between heat and motion, transforming them into each other—motion producing heat and heat producing motion. In this way they have sought the mechanical equivalent of heat, and have obtained the quantity of heat used up or lost in different machines. The same must necessarily occur in the muscles; a certain quantity of heat produced by respiratory combustion, should disappear to be transformed into motion. Experiments upon this subject are being made at this time, at Breslau, by M. Hiedenhaim, but the result has not yet been published. At Paris, Mr. Beclard has also made some experiments relative to this question, and he has drawn a distinction between the state of *static contraction*, that is to say, contraction without resistance to the dragging power, and the state of *dynamic contraction*, which is contraction with resistance to the dragging power. The muscle placed in the last condition will produce less heat, because it has more resistance to overcome, and consequently more force to display.

The muscles separated from the living body preserve all of their properties for a certain time, until they have consumed the medium which they have carried away, which permits them still to exhibit vital phenomena. They retain their vitality much longer in cold than in warm weather; because physico-chemical phenomena are retarded under the influence of a low temperature, their supply of the medium is less rapidly dissipated. For the same reason the muscles of a cold-blooded animal resists death for a much greater length of time than those of a warm-blooded animal.

When the contractility of the muscles has ceased, cadaveric rigidity soon appears; every limb, until then, soft and flabby, becomes stiff and hard, they can not, as formerly, be placed in any desired position, and the joints resist all efforts to move them. Cadaveric rigidity is altogether general, and Hysten, in investigating this phenomenon on the bodies of culprits, has observed that in man it first begins at the head, and gradually extends to the extremities of the lower limbs. Cadaveric rigidity, after all, being only the death of the muscle, should be produced more or less rapidly, according to the state in which the muscular system is found at the moment of death. Indeed, under various circumstances, the more or less vigorous muscles retain a very variable amount of muscular juice, which will permit them to resist, for a greater or less length of time, the invasion of cadaveric rigidity.

J. Müller supposed that this rigidity was due to the coagulation of the fibrine of the blood; but he had made no experiment to support this hypothesis. It is now well established that it is to other and very different causes that we are to look for the explanation of this phenomenon.

A certain time after death, *lactic acid* is generated in the muscle which destroys the alkalinity of the muscular juice, and as a consequence brings on coagulation of the *syntonine*, the contractile substance inclosed in the muscular tubes. M. du Bois Reymond has noticed that the muscles, during cadaveric rigidity, had an acid reaction. On the other side, to arrest this rigidity in the muscles, where it is first seen, it is only necessary to return the muscle to its normal medium, the blood, which having an alkaline reaction, destroys the acidity of the lactic acid produced since death, and restores to the muscle its nutritive elements. On the other hand, cadaveric rigidity may be brought on by the action of certain poisonous substances; and instantaneously, by heat; then there is lactic acid, potassa, sugar and even a glucogenic substance.

The muscular juice is then a highly complex material; there are besides great differences in its composition, depending upon the state of repose, or contraction of the muscle. But these differences can not be detected during the circulation which continually takes away and renews this secretion. It is for the same reason that the liver contains hardly any sugar, so long as the circulation of the blood continues; to make these investigations profitable, the circulation must be arrested.

In a fresh muscle, then, we meet with all that we have spoken of, and a fatty substance beside. But if a fatigued muscle be used, the muscular juice is less and less alkaline and finally becomes even acid; indeed, the soluble part of the muscle; increases very perceptibly. Helmholtz found in 100 parts, .73 parts soluble in water, when operating on a fatigued muscle; while a muscle, in the normal condition, gave him only .65 soluble parts. There are then in the solid portion of a muscle, insoluble parts which are transformed into soluble substances in consequence of its contraction; that is to say, the muscle is used up under the influence of the nerve during its contraction, and it becomes necessary that it should be repaired during repose; to do this it is sufficient to plunge the muscle into a liquid at a certain temperature—about 45 degrees—which is not hot enough to coagulate the albumen. So as to avoid all foreign influence, a liquid incapable of



altering the muscle in any way, is used, serum, for example. The necessary temperature is, as we have said, about 45 degrees for mammals; for frogs, it would be 32 degrees only, and for birds, 50 degrees.

This last result is very interesting, because it explains the death of animals placed under certain circumstances and the manner in which this death is produced. When a warm blooded animal is put into a medium warmer than himself he becomes hot, but much more slowly than cold blooded animals. Thus a mammal, a rabbit or a dog for instance, put into a stove of dry air, at 80 or 100 degrees, for example, soon begins to pant, his pulse beats rapidly, his respiration becomes hurried. Notwithstanding our giving all these phenomena, they will not necessarily be followed by death. But suddenly the animal falls and dies, almost instantly, without presenting the ordinary symptoms of suffering, without any remarkable circumstance indicating the approach of that catastrophe. If we then open the body immediately, all of his muscles will be found in a state of cadaveric rigidity, and on placing a thermometer into the heart, the blood will be found always at 45 degrees, with at most a variation of one degree, that is to say, at the temperature which we have seen productive of instantaneous cadaveric rigidity on the dead muscle. The same would take place if we operated on a bird or a frog, except that the temperature of the heart would be necessarily changed, agreeably to what was said above; this would be about 50 degrees for a bird, and 32 degrees for a frog. It has been ascertained too, that the muscular juice coagulates at various temperatures among these animals.

When cadaveric rigidity ceases, decomposition begins. It is then that ammonia is produced, which saturates the acidity of the lactic acid, under the influence of which cadaveric rigidity took place. But the muscle now is no longer in the condition necessary to its life, it can not recover the contractile power which it has lost.

When cadaveric rigidity is produced instantaneously by heat or by the action of a poisonous substance, its duration is very short, and it disappears only to give place to the decomposition of the muscle, which must restore all of its elements to the inorganic world. Cadaveric rigidity is then truly, in every respect, the last phenomenon of the life of the muscle, and it is with it that we shall terminate the investigation, we have made of this important histological element.

## Medical Societies.

## ACADEMY OF MEDICINE.

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**Strangulated Hernia.**—*Dr. Dawson* reported a case of strangulated inguinal hernia, seen in consultation with Dr. Bramble. The patient was an adult negro. Chloroform and taxis had been repeatedly essayed; reduction was impossible from the old adhesions to the sac and the scrotum. Seventy-two hours after the first visit, the symptoms indicating the necessity, Dr. Dawson cut down upon the bowel, by careful dissection, through the superposed layers, when he suddenly found he had entered the gut. The adhesions between it and the sac were of such nature as to render them a common tissue, so that distinction was impossible. Having united the divided intestine with the Glover's suture, he finally succeeded in separating the bowel, and returned it into the abdomen. Death ensued in forty-eight hours. The case was one of old, irreducible hernia, and though the patient claimed to have himself returned it on several occasions, it was highly improbable that this result had ever been entirely accomplished. Dr. Dawson commented at some length upon the individuality of every case in practice.

*Dr. Gobrecht*, having excluded cases of the character of the present report, remarks that he has been entirely successful in effecting reduction by means of cold. He explains its action by its known power of exciting contraction of the blood vessels and intestinal walls, thus diminishing their size. Heat and relaxants have a contrary effect. The first case of its employment in his observation was at the Pennsylvania Hospital, eighteen years ago. It was then stated that prolonged taxis should be avoided, from the danger of exciting inflammation. The ice bag was applied and speedy reduction effected. Since this time he has himself successfully employed it in five or six cases.

*Dr. Conner* suggests that, had there been no adhesion to the scrotum, the hernia might have been reduced *en masse*. Such adhesion as existed in this case, however, precluded the attempt. He further relates the case of a soldier who was suddenly awakened in the night by the pain of an immense tumor at the external ring. Taxis failed. There were no constitutional effects for four days, when death suddenly supervened. A decided reaction was manifest, however, a few hours before its occurrence. A *post mortem* revealed the bowel divided by the constriction for three-fourths of an inch of its circumference. The feces being removed, it could readily be returned. *Dr. Conner* remarks further upon the great efficacy of cold, detailing a case of recent success in his own practice, in an infant with double rupture. The value of morphia hypodermically in certain cases, and the reputed efficacy of acet. zinc in 5-15 grs., with opium 1 gr. per anum, were also suggested.

*Dr. Gobrecht* hoped that his remarks had not created the impression that he did not believe in the occasional necessity for the knife. The constriction may be at the neck of the sac, and then even a reduction *en bloc* would not afford relief.

*Dr. Dawson* repeats that the general adhesions to the scrotum prevented a reduction *en masse*. Gross states that he has not used the knife since the introduction of chloroform, but in a case of this kind incision offered the only hope of relief.

*Dr. Gobrecht* reports a case of hernia of the sigmoid flexure, in which forty-eight hours of taxis excited such inflammation as to produce one and a half pints of pus in the peritoneal cavity. The protrusion exceeded any case of his observation.

*Dr. Ludlow* stated that two years ago he reported a case of strangulated oblique inguinal hernia, wherein he succeeded in dilating the constriction in forty minutes, by introducing the little finger, followed successively by others, between the gut and the seat of constriction, as recommended by Gross and Erichsen.

Upon this a discussion sprang up as to the possibility of entering the finger, and of effecting dilation of fibrous tissue in general. The discussion was maintained by Drs. Conner, Ludlow, Gobrecht and Orr.

*Dr. Carson* spoke of a case of *Dr. Blackman's*, somewhat similar to that reported by *Dr. Dawson*. It was an old hernia, with several diverticula and some incarceration.

*Dr. Dawson* says, in regard to the return of a hernia *en bloc*,



that symptoms of strangulation have persisted even after its performance. The surgeon, in such case, has cut down upon it and divided the stricture with complete relief. Dr. Wood had just such a case.

**Wounds of the Brain.**—Dr. Dawson reported the case of a wound of the brain of a negro in the hospital, briefly referred to several weeks ago. The skull is exhibited as displaying the seat of injury across the squamous portion of the temporal bone. On receipt of the injury, which was inflicted with a hatchet, he was felled to the ground insensible, in which condition he remained for a considerable time. An indefinite amount of brain substance was lost. For three or four days he remained conscious, then passed into a stage of semi-consciousness, from which he could be sufficiently aroused to give a rational answer. The brain shows its loss of substance. There was very little suppuration throughout, in the cavity which is situated at the side of the base of the brain. Death ensued on the tenth day. A considerable amount of pus was found upon the surface of the right hemisphere, indicative of the extent of inflammation.

The doctor then, by way of commenting upon the impurity of certain serious lesions of the brain substance, narrates the following instances: A case reported in the *French Medical Bulletin* of destruction of the entire right anterior lobe, from two pistol shots, self-inflicted, with considerable injury to the left anterior lobe. Recovery, with loss of sight, and change of disposition for the better. Patient lived seven years. — Cunningham, of Sussex, England, reports a case in which the breech-pin of a pistol was pushed backward through the hemisphere, and lodged in the tentorium. No suppuration ensued. The course of the wound entirely healed, and the patient lived twenty-four days.—The *London Lancet* reports an almost apocryphal case of an explosion in a slate quarry. A young man was struck in the frontal region, and this portion of the skull was almost shattered. A surgeon, called in consultation, observed the attending physician fearlessly probing the brain in every direction to the occiput. He describes the sensation of, and manipulation, as of probing a puddle. The patient recovered.—Dr. Holstein, formerly of this State, mentions the case of a woman thrown from a horse and dragged and kicked in the head. Several days afterward, a number of protruding spicula were removed, when the side of the frontal bone was

observed to have been comminuted. The malar bone on the right side was crushed in also, so as to impinge upon the brain. Having removed all the remains of the frontal bone, the patient recovered consciousness for the first time. In this case, also, there was a decided moral improvement. In a case narrated by a French professor, of cancer of the eye,  $1\frac{1}{2}$  ounces of the anterior lobe were removed in the operation of its ablation. The patient lived without paralysis for fifteen months.—Last summer, a remarkable case occurred in Covington. A tumor projected from the left side of the frontal bone; an incision revealed its encephaloid character. In its removal, the brain substance was scooped out, back to the border of the orbital plate. The cavity, some two inches deep, partially filled with blood, and pulsated at the bottom. In the afternoon of the operation, the patient was conscious, and comfortable. No brain symptom has, as yet, appeared.—O'Callahan reports an officer who lived seven years with the head of a pistol lodged in his brain.—Rice, of Boston, gives an instance of great loss of brain substance, with moral improvement.—Heman, of Indiana, an accident by machinery, in which  $3\frac{1}{2}$  by  $1\frac{1}{2}$  inches of the skull was destroyed. Perfect recovery.—At the suggestion of Dr. Gobrecht, Dr. Dawson also mentioned the celebrated Cavenish crowbar case. The skull is now preserved in the Boston Museum.

*Dr. Young* reports a case of loss of more than one-half of the left anterior lobe from a gunshot wound. The ball remained embedded in the posterior portion of the brain. The patient lived for fifteen days, with an unimpaired mind, as evidenced by his ability to calculate interest. Dr. Young promised to present the specimen, with a drawing, at some future meeting.

*Dr. Dawson* mentioned an apocryphal case, as reported from California. The head was sawn through, and its two sides separated to a great distance. It was apocryphal because a separation could not be effected with the basilar process intact. To divide this would imply a lesion of the medulla oblongata, and, of course, instant death.

*Dr. Miles* reported a case of injury of the skull three inches long, in a negro, above the frontal eminence. About one drachm of cerebral substance escaped. In removing the spicula, another drachm followed. On the sixth day the patient resumed labor as a blacksmith, the wound having united under suture by first intention.

*Dr. Jessup*, by invitation, reported that he saw the case of *Dr. Kearn's*, mentioned by *Dr. Dawson* as having occurred in *Covington*. A cheesy mass, underlying a dry incrustation, had been observed by a physician first called, on elevating the mass of the tumor. The excavation, originally two inches in depth, had now filled up perhaps one-third. General condition at present favorable to complete recovery. There had never been an intellectual disturbance, or paralysis.

*Dr. Hadlock* detailed the case of a gun-shot wound of the forehead. Both plates of the frontal bone were fractured, and considerable brain substance lost. Having dressed the wound, the patient was left in an insensible condition. Three or four days afterward he walked into the office to have the dressings changed. Recovery was complete. He is still living, and is now a stage-driver out West, with a large depression at the seat of injury. From the fact that he killed his adversary almost a year after the accident, any hope of moral improvement is excluded.

*Dr. Wright* mentions a case from the battle of *Shiloh*. A shell explosion almost destroyed the frontal and parietal bones. Much brain substance was lost, and for weeks afterward cerebral matter saturated his pillow. He lived twenty-four days, for twenty of which he retained his mental faculties almost intact. He referred to *Dr. Thornton*, into whose hands the patient passed.

*Dr. Thornton* expressed his thanks for this reminder, and reports that he has had in all three cases of severe injury to the brain, two of which recovered. The third, the case referred to by *Dr. Wright*, as stated, died. One of the cases of recovery is interesting, from the fact that the boy is still living with complete absence of one side of the skull. He was severely kicked by a horse, destroying a large part of the frontal bone. Spicula which were driven in upon the brain were removed under chloroform. Intellect is still perfect.

*Dr. Conner* reports the case of an old pensioner, in whom a loss of two and a quarter by one and a half inches of bone, at the junction of the sagittal and coronal sutures, was now completely filled in by cicatricial tissue. No mental injury. This summer he has treated a boy whose *os frontis* was severely injured by the kick of a horse, necessitating the removal of a considerable portion of the bone. Recovery is now complete. He also reports a case he had at *New Orleans*, from *Port Hudson*, in which a large quantity of bone was removed, and the patient recovered so completely as to



be enabled to resume duty. Upon his entrance into the hospital, there was a complete paralysis of the left side, which was relieved by loosening the sutures. Three other cases are related, in one of which a special point of interest was the fact that the ball partially split in two portions, one of which passed internal, and one remained external.

*Dr. Ludlow* relates a case of gunshot wound, in which the nearer the patient approached death, the more conscious he became. Patient lived eight days. On *post-mortem* it was found that the ball had split in two, and both halves were lodged in the left ventricle. In another case, a man was clubbed by thieves; much brain was lost, and a portion of the frontal bone. He is still living, but is demented.

*Dr. Dawson* mentions that the most interesting feature of his brain case, reported in a recent number of the LANCET AND OBSERVER, was accidentally omitted, viz: The rupture of the brain substance by *contre-coup*. The simple fracture of the brain alone would not have justified its publication.

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At a meeting of the Academy on the 24th of October, numerous specimens from the laboratory of Charles T. White & Co., of New York, were exhibited by Dr. J. S. Unzicker, Chairman of the section on new remedies and pharmacy.

Among them, the resublimed carbonate of ammonia was very fine, and none other ought to be used by pharmacists in their prescription business. Those who have employed it for making spirits mindereri, with the pure acetic acid of the above firm, speak in the highest terms of the fine quality of the preparation. The chlorate of potassa, muriate of ammonia and iron by hydrogen, were also excellent. The sulphate of morphia was most beautifully crystallized, and very white. In fact, they were all that could be desired, and we hope the time may soon arrive when none but the best chemical and galenical preparations will be tolerated in putting up prescriptions. Physicians could do a great deal toward bringing about so important a change for the better. Let them insist that their prescriptions shall be composed of the best material only, or have them send to those who are willing to comply with such reasonable request. This they owe to themselves and their patients, for whose lives they are more or less responsible. Besides, their success in practice would be far greater, by paying a little attention to these facts.

## Hospital Reports.

### *Cincinnati Hospital--Surgical Clinic of Dr. W. W. Dawson.*

Reported by Dr. R. J. CLARK, Resident Physician.

*Two Cases of Acromio-clavicular Dislocation.*—Patrick Flannigan, age thirty-five years, Ireland, laborer, October 18th, was being drawn out of a deep well, when he lost his balance and fell a distance of twenty-five feet, striking on his head and left shoulder. The injuries sustained by the fall, were a dislocation backward and upward of the acromial end of the left clavicle, and a compound fracture of the skull near the junction of the coronal and sagittal sutures; there was no depression nor detachment of bone, the skull being cracked. When admitted he was perfectly rational. October 24th, the sixth day after the accident, he was seized with a violent attack of mania a potu, which lasted two days, and was successfully treated with hydrate of chloral, in doses of 15 grains every hour. The deformity produced by the dislocated clavicle could be entirely reduced. The arm was confined to the side by means of adhesive strips. November 6th, nineteen days after the accident, the patient was able to walk about the ward; the deformity produced by the dislocation is well marked, but the use of the arm is unimpaired.

Jerry O'Brien, age thirty-seven years, is a strong, healthy Irishman. Ten years ago he fell from a steamboat and suffered a dislocation outward and upward of the acromial end of the right clavicle; he was treated by the late Dr. R. D. Mussey. The dislocation was easily reduced, but the bone could not be kept in place. The deformity is well marked, but the use of the arm is unimpaired, although he can not carry any weight on his shoulder without suffering pain on account of the projecting bone.

I present to you to-day, gentlemen, these two cases of this rare dislocation—luxation of the junction between the clavicle and scapula. There is no articulation so poorly protected as this, both in respect to the conformation of the bones, and in the supply and arrangement of the ligaments. The scapular end of the clavicle is flat and thin, and has not more than one-third of an inch in

breadth by half an inch in length of articular surface, corresponding to a like surface on the acromion. The ligaments are made by a superior and inferior band, of no unusual strength or thickness; hence, this joint is necessarily insecure. Sometimes, often I may say, an inter-articular cartilage is furnished to this joint, rendering the insecurity still more marked, and yet, with all this seeming imperfection, we seldom see a dislocation here; falls upon the shoulder, violence applied to the part produces dislocation of the head of the humerus or fracture in the neighborhood, seldom acromio-clavicular displacement.

*Treatment.* Here we are helpless; it is not in the power of surgical appliances to keep these two narrow surfaces of bones together. The acromion is comparatively stationary, but the clavicle, influenced as it is, by large and powerful muscles, is drawn from its position, from the immediate neighborhood of its acromio-articulating surface, and no power which we can apply will keep it in its original position. One of these cases is recent. You see the end of the clavicle mounting up, over and behind its articulating fellow, making quite a prominence on the summit of the shoulder, mere pressure obliterates the protuberance, but no apparatus which we can put on this patient will continue the obliteration of this shoulder deformity. The other patient, Jerry O'Brien, ten years ago, suffered this dislocation, and to-day, he has the same deformity, the same tumor opposite the acromio-clavicular articulation, where you should have a smooth surface. Fortunately, in these cases, although you can not keep the articulating surfaces in contact, nature supplies the want, forms a kind of socket for the liberated end of the clavicle, and the functions of the arm are usually not impaired. Let me warn you, gentlemen, when you are called to an acromio-clavicular dislocation, inform your patient and his friends that he has met with an accident, the only result of which must be deformity.

One of these patients, Patrick Flannigan, as you have learned by the history, had a fracture of the skull without depression, which needed no treatment, and an attack of delirium tremens, which was successfully controlled by the hydrate of chloral. For the dislocation, Dr. Clark, the resident physician, confined his arm to his side by adhesive straps, to keep the parts as quiet as possible. The other, Jerry O'Brien, was treated, near a dozen years ago, by that eminent surgeon, the elder Mussey. In both you see the same result.



*Lithotomy—Lateral Operation—Recovery.*—Emil Zehagen, a healthy German boy of eight years of age, has had symptoms of stone for several years, such as severe pain during and after micturition, incontinence of urine, a feeling of uneasiness in the penis, indicated by frequent handling of the organ; urine shows traces of oxalate of lime; he urinates frequently, with sudden stoppage. These rational signs are rendered of value and made conclusive by the touch of the stone and the click which the instrument makes audible to those of the class near the operator.

On the 10th of October, Dr. Dawson, by the lateral operation, removed a stone, measuring one and a quarter inches in length, one inch in breadth, and one-third of an inch in thickness, weighing one hundred and forty grains.\*

A catheter was introduced through the incision, not so much for the purpose of obviating urinary infiltration, as of preventing *retention of urine*, a complication always troublesome, and often fatal. At the end of forty-eight hours the catheter was removed, the patient was comfortable, and most of the urine passed by the urethra.

October 26. Sixteen days after the operation, all the urine passed by the urethra, the wound almost healed.

November 14. Discharged well; is able to retain his urine fifteen hours.

*Chopart's Amputation.*—The patient which is presented to you this morning, with a badly damaged foot, is sixty-two years of age, single, a merchant, and has for thirty years been a free and, at times, an excessive drinker. Last night, November 3d, 1870, while in a state of intoxication, in attempting to get on a railroad train, he fell, and one of the car-wheels passed over his right foot, crushing it from the toes to the tarso-metatarsal articulation. Amputation here is imperative. Where shall it be performed? The operation of Mr. Hay, of Leeds, through the junction of the metatarsal with the tarsal bones is excluded, on account of the great injury done to the soft parts in this neighborhood. The material out of which a flap could be made is, by the great violence, already devitalized; a covering made from it would slough, and in forty-eight hours leave the bones exposed.

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\* Dr. McKenzie analyzed the stone, and found it to be oxalate of lime in the center, with an incrustation of phosphate of lime.

Passing upward, the next point at which we arrive, where we may amputate, is the line made by the calcis and astragalus posteriorly, and the scaphoid and cuboid in front. Removal of part of the foot through this line is known as Chopart's amputation. Here it would seem that sufficient uninjured tissue may be obtained to make a good flap. What are the advantages and disadvantages of this operation? We must elect between it and Syme's operation, or that operation as modified by Pirogoff. The amputation of Chopart leaves the limb of its normal length, while the operation of Syme reduces it the thickness of the astragalus and calcis. Pirogoff's modification adds to this abbreviation only a pad from the os calcis, increasing the length of the limb about three-quarters of an inch. The greatest advantage, however, is that by Chopart's amputation we have enough of the foot left to give a good support to the body, rendering walking almost, if not quite, as easy and comfortable as when the whole of the tarsal bones are preserved.

The disadvantage of this operation consists alone in the occasional want of antagonism between the extensor muscles and the tendo Achillis. The extensor tendons divided do not unite in such a way as to counteract the contractions of the gastrocnemius; the heel is drawn upward, throwing the point of the stump, with the cicatrix, to the ground. This renders the limb longer than the other, and gives great pain from the weight of the body pressing upon the cicatrix. This, however, is generally remediable by the division of the tendo Achillis.

From the great shock which this patient received, and from which he has not yet (although more than twelve hours have intervened) entirely recovered, from his previous habits, and on account of an irregular pulse and a feeble and unsteady heart, it is deemed best to give him ether instead of chloroform.

The operation is performed, as you see, by a short dorsal flap first, next the disarticulation, being careful here not to open the ankle joint; then a flap formed of the sole of the foot, of sufficient length to cover the bones and make an easy union with its fellow. The dressings, on account of the depressed vitality of the patient, should be rather dry and warm, instead of the usual cold water applications.

## Correspondence.

*Brain Tumors.*

Case of DAVIS B. LAWLER.

MR. EDITOR—Having furnished the case of Mr. Wade, to show Dr. Bartholow's great faculty in one respect, I now offer a critic on his Lawler case, to show it in another.

The report of the case of Davis B. Lawler, deceased, in the December number of the *Lancet and Observer* for 1869, is altogether the most remarkable one of that great publicist, Robert Bartholow, M. D. As a contribution to science, and an evidence of his fine reasoning powers, it should have the first rank of his productions.

Let me prove this by an examination of some of its leading features.

## APHASIA.

First, and the most remarkable one, as he tells us, was Mr. Lawler's peculiar phase of aphasia, *amnesia* of written language. Dr. Bartholow states that aphasia is a word proposed by Trousseau, and includes the loss of the faculty of articulate, written, or sign language; that is, a man may be able to think, in this disease, to have ideas, *but is unable to communicate his ideas to others*, by any means. Now, there are grades of this affection, viz: A man may not be able to speak or to write, but can communicate his ideas by gesture; or, in short, he may have one or two of these faculties intact, and one or two missing. But a man *aphasic in either form* has always lowered intelligence, his whole mind is enfeebled.

Dr. Bartholow says: "Mr. Lawler had complete use of his tongue and articulation until within a few weeks of his death, his *vocabulary was extensive and rich, especially in unusual words*; but names of persons, places, and dates frequently escaped him." "He could *write* directions in regard to business transactions, and immediately afterward, while it was fresh in his mind, *tell* what he



had written." He could write his name admirably (Dr. Bartholow gives a specimen), though afterward he would ask if it was his name. There is complete evidence in his case, too, that Mr. Lawler had not lost the faculty of conveying his ideas by gesture.

It thus appears that Mr. Lawler was able to communicate his ideas richly, in words, and by writing, and by gesture; he was *not* aphasic, by Dr. Bartholow's own definition, which he copied from Trousseau, nor was he aphasic according to the definition of *any* authority. And, moreover, I should have said that there is abundant evidence, also, that his intelligence was better than is usual at his advanced age, which was also proved by the testimony, before the Probate Court, of A. H. McGuffey and J. C. Butler, Esquires.

In regard to his difficulty in reading printed or written language, we have ample explanation in his ocular defects, for Bartholow says, "the pupil of the left eye was dilated and motionless, and a commencing opacity in the left crystalline lens;" and, although the right eye was as good as he describes, the confusion of vision, owing to the mydriasis of the left one, and his advanced age, must have rendered all his close efforts at vision very fatiguing, and very imperfect; and, therefore, he was compelled to give it up almost completely.

Dr. Bartholow says, "this faculty of correct writing in Mr. L. was an *automatic* act, that is, machine-like; but machines don't think what they are doing, or how; it is an invariable process with them, no alterations or variety, as are suggested by the mind while writing business directions. All of our voluntary actions, such as locomotion, articulation, singing, reading, writing, playing on instruments, and gestures, are acquired by slow and tedious processes; at first we step hesitatingly, articulate imperfectly, read slowly, and spell words as we go along, and to play on instruments superiorly, requires immense practice; but at length we are able to express ourselves in all these forms without thinking how we shall do it—it is but willed; words flow from the lips, or pen, we walk, or run, or play on the instrument rapidly, without the old hesitation, and this becomes so machine-like that it is likened to automatism. But there is this immeasurable difference between the inanimate and the animate machine; in the human all voluntary movements are guided by consciousness of something which helped or guided us as we learned. There can be no co-ordination of our ideas without the memory of words, or figures to embody them,

and no correct intonation of the voice in speaking, without the guidance of the muscular and auditory senses. A plug of wax in the ear at once affects the tone of the voice. In walking it is the combination of the muscular sense and the visional which keeps us upright and directs our way; and so for the rest. These guiding sensations we almost forget the value of, so little do we seem to rest upon them in our habitual (automatic) movements; but let them be withdrawn, even partially, and then we are painfully convinced that our movements were not automatic.

## THE TUMOR ON THE BRAIN.

Dr. Bartholow says he made a *post-mortem* examination, and found a globular calcareous mass in the left ventricle, wedged down in the middle cornu, and compressing the vessels of the choroid plexus so as to interrupt the venous circulation of this part of the brain, causing a great effusion of clear serum, and producing extensive alterations in the posterior lobe of the brain. But the *location* and *nature* of this adventitious growth he made no account of in his description of Mr. Lawler's symptoms. He tells in one place, *mirabile dictu*, that he knew there were structural alterations in the *right* hemisphere, as evidenced by the dilatation and immobility of the *left* pupil; while a little further on he assures us that there was disease in *SOME PORTION* of the *LEFT* hemisphere, for the same reason. I might charitably suppose this an error of the printer, but as two or three different issues of the article appeared, by Dr. Bartholow's approval, and distributed by him in pamphlet form, I must attribute it to one of his spasms of mental ataxia so frequently exhibited.

Now, as Dr. Bartholow has called me so severely to task for not being able to locate the exact spot of an adventitious growth in the brain, I feel called upon to point out his own weakness in making so general a statement that a "*hemisphere; or some portion* of the brain was diseased, and, that he *changed* his views from the right to the left side in different parts of his narrative. But had he anything to guide him to a definite opinion? Certainly, for he points out the calcareous degeneration of the radial arteries, the paralysis of the third pair supplying the left iris, and his difficulty "to maintain the vertical station—his tremulous and ill-assured walk, causing severe falls, and severe periods of vertigo." A man of Bartholow's *soi-disant* fine differentiating powers should have been able to locate such a growth of calcareous matter, more

especially as it compressed the choroid plexus. He says, indeed, that the autopsy "enabled him to verify the existence of the lesions he had diagnosticated during life." It is evident, though, that he (B.) was troubled with *amnesia* to some extent, for this lesion is not mentioned in his diagnosis.

#### THE HEART AND ARTERIES.

He says that the left ventricle was *somewhat* enlarged, and most extensive calcareous degeneration existed throughout the arterial system. The aorta was hard, brittle, and chalky in color; large calcareous plates could be detached from its serous lining. The semi-lunar valves of the aorta were extensively calcified, and the aortic orifice so narrowed that the little finger could be just pushed through. The chordæ tendineæ of the mitral valve had also undergone calcareous degeneration, and portions of the valve, likewise the walls of the left ventricle, were somewhat hypertrophied. The basilar arteries (of the brain), the circle of Willis, the middle and anterior cerebrals, were thick, hard, white and chalky. All of these arteries had varicose dilatations, a condition of things which extended to the smaller arteries of the brain." He had previously been convinced, by his examination, of the mineral degeneration of the arteries; moreover, he had heard a loud, bellows murmur at base of the heart, propagated both ways, and had diagnosticated obstruction and insufficiency at aortic orifice, and mitral regurgitation, due to calcareous degeneration of valves, and probably of twenty years' standing; though it does not appear, he strangely says elsewhere, "what relations existed between the change in the valves and altered condition of the heart's movements.

It is certainly not too strong a statement for me to make that, from the description of Dr. Bartholow, the arterial system of Mr. Lawler was a ramification of rigid tubes, without the elasticity or resiliency so essential for the normal circulation of the blood; that the stream, in short, could only flow in jets, and thus fail to keep up that equable and momentary supply to the capillaries, so essential to nutrition. It is impossible to conceive that life could have been maintained so long in such a case. Yet Dr. Bartholow assures us that the "nutrition of the body was maintained at a uniform level," and "after his violent gastro-intestinal attacks, the waste of tissue was promptly repaired." Moreover, we are furnished with a sphygmographic trace of the radial artery, which



shows as great "amplitude" as that of young Dr. Ludlow, with whose trace he compares it.

The conclusion then is, from the perfect state of his patient's nutrition, as he gives it, and the sphygmographic trace furnished, that no such mineral degeneration of the arteries existed; he only guessed at it. And this trace also shows by its outline (six complete revolutions of the heart are traced) that no obstruction of any moment existed at the aortic orifice, so entirely different is it from the well known trace furnished by the pulse under conditions of aortic stenosis.

Then again, the general conditions of Mr. Lawler contradict both his diagnosis and autopsy of the state of the heart. Could a man live so long (82) with incompetency of the semilunar and mitral valves without the general symptoms of labored respiration, cough and dropsical effusions? It is not to be thought of. And then with all these defects the "left ventricle was only *somewhat* enlarged!" All the symptoms that Dr. Bartholow attributes to this ruined condition of the central organ of the circulation, were the vertigo, suffusion of the face and eyes, and swelling of the veins of the forehead; all legitimate enough if they existed, and only prove that other and more formidable conditions must have been seen, if so altered a state of the hydrostatic conditions of the circulation were realized.

#### NEW DISCOVERY.

What Dr. Bartholow assumes to be a new discovery in this case is, "that the posterior lobe of the left brain takes part in the important intellectual operations of speech and written language;" but as he shows us that Mr. Lawler had rich conversational powers, and had all the intellectual faculty necessary to communicate his purpose in correctly written language, the reader will be at a loss to see how the tumor in Mr. Lawler's brain, and its effects upon the circulation of the lobe, is any proof at all of Dr. Bartholow's new phase of that disease.

#### CONCLUSION.

In looking over this case, then, as presented by Dr. Bartholow, we are bound to consider it a question from the symptoms he gives, whether or not he made an autopsy, except in his own brain, and his facility for making up cases out of books, so often exhibited, justifies such a question; but if he shall continue to

insist upon it, I demand the name of a doctor or other person who witnessed it.

But if his autopsy be proven, why then, we might doubt if he ever attended the patient, so little does his handy setting forth of the "objective and subjective symptoms" harmonize with the *post mortem* revelations. As he has proved in court his "almost daily visits and observations for 15 months," we must accept it; but may not we ask what could he have been doing there so constantly, as the patient only had a few "gastro-intestinal" attacks? The answer is found in his narrative. He advised, as Mr. Lawler had *amnesia* of written language, or printed, that he *should be taught over again*, beginning with the primer; that is, seeing as Bartholow states that he had *amnesia* or loss of memory of all his past knowledge, he advised that he be taught over again, with certainty, as Bartholow shows, that he would *forget everything again in half minute after he learned it!*

Who could teach successfully so defective a man, such an automaton, as he describes him? Why, only Bartholow, surely, and therefore, he called every day, doctoring him as occasion required, doubtless! But reader, really, in whose hands should the primer have been placed? Amazing spectacle! Here is a case of attempting to draw water out of a dry well with a bottomless bucket, and a great professor and critic turning the crank!

But let us pause, and not do the learned professor of therapeutics injustice. Prof. Binz, of Berlin, has lately shown that quinine arrests the amoeboid movements of the white corpuscles of the blood. Dr. Bartholow, who keeps abreast of science, as he says, may have been using hypodermic injections of quinia to prevent the dropping out of the old man's memory, the newly taught ab and ba!

It is perfectly plain from the defects of symptomatic, autopsic and psychologic reasoning of this child of genius, that his kind Mentor was out of town when he published.

A few words (personal) to the readers of the *Lancet and Observer*.

I have not thought it necessary to reply to Dr. Bartholow's last paper, for when I have convicted him of error, as in the senses used in locomotion, he retorts by assuming my position and putting *his own* weak arguments in my mouth. Again he charges me with ignorance of diagnosis by the use of electricity, yet I knew Duchenne personally, and often witnessed his experiments in

Trousseau's wards in Paris, 20 years ago. Marshall Hall's notions have been held untenable; see Althaus' last edition on medical electricity. The whole question of diagnosis by electricity is yet *sub judice*. As to my service in some extra professional positions, it has only been to meet a unanimous public request. Every one knows that I am not engaged in politics. Let Dr. B. remember that Trousseau was a member of the National Assembly, and the great Virchow is now a most active member of the "opposition" in the Prussian Parliament.

As Dr. Bartholow has been in the general practice of medicine but a short time, his errors in diagnosis may be overlooked, but his pretensions in criticism we feel called upon to rebuke.

Lastly, his attempt to drag Professors Blackman and Parvin into his diagnostic error in the ovarian-twin case, is only another exhibition of falsification. If he was so ignorant on this subject as he now confesses, so innocently, why did he propose at all to operate? He also denies any knowledge of his elaborate diagnosis in pleurodynia. My authority is Dr. T. Carroll. After Dr. Bartholow's wholesale mendacity in the Wade case, and since, he has protested that *honor has nothing to do with* pathological examinations (see his last article), I think that your readers are prepared to estimate at their worth any future publications of his.

C. G. COMEGYS.

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BOSTON, MASS., November 11, 1870.

MESSRS. EDITORS: Although my pen has been silent, upon medical matters, for some months, still the "hub" moves on, in the even tenor of its way, in all that pertains to the healing art.

The annual course of lectures in the medical department of Harvard University, was fully inaugurated, November 2d. The introductory lecture was given by Dr. James C. White, Assistant Professor of Chemistry, and appeared in the *Boston Medical and Surgical Journal* of the next day. This is certainly commendable on the part of the publishers.

The address is high-toned in its character, and points out the true course of student life. Prof. White is decidedly Germanic in ideas, and he advocates a *higher and more scientific* course of instruction in our medical schools. That the term of study for



the student should be five years; that the leading and collateral branches of medicine, should be taught as a *science*, and that our schools should vie with those of Europe.

Dr. William T. Lusk, of New York, has been added to the corps of lecturers. He takes the chair of Physiology, and will give strength to the Faculty.

The Dental School Committee, with the medical department, enters upon its third course of instruction. Separate apartments have been fitted up since the last term. The laboratory is large enough to accommodate from forty to fifty students at a time, and ample provision is made to demonstrate the manufacture of mineral teeth. The lecture room will seat about eighty students. There is another Dental School in full operation in this city, with its corps of teachers; but its facilities are somewhat limited, and it does not receive the *prestige* of the other school, on account of its non-connection with Harvard University.

At the recent opening of the twenty-third annual term of the New England Female Medical College, a new building was dedicated for the use of the school, with somewhat imposing ceremonies. The building cost about \$40,000, and is very thoroughly constructed. It seems that in November, 1848, this institution was opened with a class of twelve pupils, and has continued till the present, amid vigorous efforts on the part of its friends, and coldness and indifference from a greater portion of the community. Seventy-nine ladies have been through the three years' course, and graduated, and over two hundred others have attended a partial course.

I learn that the anniversary commencement of the Dartmouth Medical School took place November 3d. The address to the graduating class was by Dr. Conn, of Concord N. H., a delegate from the State Medical Society. The President of the College awarded diplomas to sixteen graduates, from various sections of the country. This ancient school still holds on to the affections of many of the profession all over the land; our memory recalls many of the living, as well as of the dead, who have been distinguished as lecturers, in this and other schools, and who received, from this venerable institution, their first rudiments of a sound medical education.

A free course of lectures is now given at the Massachusetts Institute of Technology, on general Chemistry, Physiology and Hygiene, Qualitative Analysis, and other branches, pertaining to

literature, mechanics and mathematics. These lectures are open to both sexes.

The *Boston Medical and Surgical Journal*, in its issue of November 3d, was devoted entirely to the use and benefit of the students. The first number of each month, during the winter lecture term, will, also, be called the "student's number." At the annual meeting of the Massachusetts Medical Society, in May, the following resolution was passed:

*Resolved*, That the Massachusetts Medical Society hereby expells from fellowship, all those who publicly profess to practice in accordance with any exclusive dogma, whether calling themselves homeopaths, hydropaths, eclectics, or what not, in violation of the Code of Ethics of the American Medical Association.

Also, the By-laws were amended, by striking out the following: "But any person having graduated as Doctor of Medicine at Harvard University, or the Berkshire Medical Institution, shall, if otherwise qualified, be admitted without further examination as to his medical attainments." This amendment went to the Councilors for concurrence. At the October meeting of the Councilors, it was concurred in without count, thus placing graduates from all regular schools, on the same footing, as regards their admission to the Society. The resolution for the expulsion of homeopaths, etc., remains inoperative, inasmuch as the By-laws require, that before the expulsion of a member, he must be tried before the Commissioners of Trials, upon charges preferred.

It will be recollected by most of your readers what action was taken, at the last meeting of the American Medical Association, in regard to the admission of the delegates from Massachusetts.

Drs. H. R. Storer and J. L. Sullivan presented a protest from the Boston Gynecological Society, against their admission, as the Massachusetts Society contained some homeopaths. The Committee on Medical Ethics finally voted to admit them, with some reprimand to the Society.

At the annual meeting of the Councilors in May, a report signed by seven delegates of our State Society, to the Association at Washington, was presented, reflecting upon the action of those who had entered a protest against their admission. This report, and all papers and facts bearing upon the subject, were referred to a Committee of Five, to report at the October meeting of the Councilors. At this meeting, the Committee, through their Chairman, made the following report:

"I. That they found the statements in the report referred to them substantially correct; that objections to the admission to the American Medical Association of the delegates] of the Massachusetts Medical Society were presented by Dr. H. R. Storer and Dr. J. L. Sullivan, *without proper notice having been given by them of their intention to present said objections.*

"II. That in their opinion, in view of the fact that Drs. Storer and Sullivan were members of the Society, their omission, apparently premeditated, to give such notice was, to say the least, an act of discourtesy which deserves censure.

"III. The Committee further reported that the action of the American Medical Association, in effect imposing conditions upon the rights of this Society, was ill-considered and unwarranted; and they advised, before again sending delegates, a committee be appointed to make a formal representation to the American Medical Association at its next annual meeting, with a view of procuring a reconsideration of its action in the premises.

"IV. The Committee recommended that no delegates from the Society be sent to the next annual meeting of the American Medical Association."

I quote from the published proceedings in the *Boston Medical Journal*:

"*Voted*, That these several sections be taken up separately.

"A free discussion ensued, in the course of which Dr. Sullivan pleaded that there had been no intention of discourtesy, or to surprise the Society's delegates. Dr. Millet argued that the members making the protest were personally responsible, as shown by documents from the Secretary of the American Medical Association; Dr. Savory described the unusual procedure of these members at Washington; Dr. Chapin expressed grief and astonishment that any member should, especially in such a manner, accuse the Massachusetts Medical Society of favoring quackery in any shape, especially as it had done so much, and was endeavoring to do so much, to repress it; Dr. D. H. Storer defended the Society, emphatically asserting that it had, in its corporate capacity, as well as by its individual members also, himself included, at much sacrifice of labor and means, done everything possible to put down charlatanism of every sort; declaring further, that the Society had long ago shut its doors against admission of all irregulars, but there was no power under heaven to restrain men to a prescribed practice when they had once been admitted.



"No. I, II, and IV of the resolutions were then adopted by the Councilors without a negative vote; No. III was adopted by a large majority, those opposed declaring their wish that no notice be taken of the Association, except by omitting to send delegates in future.

"*Voted*, That the Committee on the Protest constitute a Committee to represent the matter contained in resolution III to the American Medical Association."

In the November number of the *Gynecological Journal*, Dr. H. R. Storer, one of its editors, probes the action of the Councilors on the above subject, and also the action of the Harvard Faculty on various matters. He wields a *vigorous pen*, and sometimes cuts both right and left with great severity. But I fear I have wearied your patience, and I will only say,

B.

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**Dr. E. B. Stevens:**

DEAR SIR—In the October number of the *Lancet and Observer*, I find an article on the incompatibility of quinine and veratrum viride predicated on a report of Dr. Bradley, of St. Mary's, Ohio. I think his premises false, and if so, of course his conclusions could not fail to be erroneous. I have been using the v. v. for the last twenty years, and still use it in all cases where it appears to be indicated. I have always used it indiscriminately, with quinine or not, as I thought necessary, and I can recall no case where any evil has resulted from thus using it. I have never seen the alarming symptoms of collapse from the use of it, either with or without quinine. I have occasionally, in persons easily susceptible to its influence, got its extreme effects, to-wit: severe retching and vomiting with the injection of tenaceous mucus, a slow, round pulse, and a soft, moist and warm skin. But the feeble pulse, cold surface and extremities of collapse, I think must be very rare from this cause. You, doubtless, remember that when Dr. Norwood introduced the v. v. as the remedy par excellence for typhoid fever and pneumonia, he recommended bringing the system powerfully under its influence, so that if the pulse did not come down, to push it till it produced retching and vomiting, which he claimed was not at all dangerous, though alarming, but these alarming symptoms readily disappeared upon the administration of an opiate or stimulant. He claimed he could cut short or arrest typhoid fever

or pneumonia by this means, but the later experience of the profession does not appear to confirm his statements in the premises. I think I am safe in taking the position, however, that in all cases of active inflammation, we possess in the v. v. a remedy of very great power, undoubted utility, certain in its action, and safe in its effects, and in all cases where we wish to moderate the action of the heart and arteries, we can safely rely on it.

JAMES LAMB.

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*Letter from Prof. S. A. Norton.*

BERLIN, October, 17, 1870.

DR. E. B. STEVENS: I hardly know where my last letter left off but suppose that I may begin again almost anywhere. I stayed in Bonn as long as the authorities would permit me to work in the laboratory and have been for the last month roaming around. Finally I have decided to study this winter with Prof. Kolbe in Leipzig, and beg you to notify my friends that my address will be No. 16 Turner Strasse, dritte Etage, Leipzig.

In my wanderings I have visited, in all, eight laboratories, viz: Leipzig, Berlin, Bonn, Heidelberg, Göttingen, Marburg, Wiesbaden, and Giessen, which I have named in order of size and completeness. I was much pleased with each one of them except that at Giessen, although this was built by, and for many years under the direction of Liebig. I have also had the good fortune to meet Kolbe, Kekulé, Bunsen, Wöhler, Carius, and Fresenius, and was very courteously received by them all. I have no doubt that a student could spend his time profitably in any one of the places I have named. At Göttingen and at Heidelberg, Wöhler and Bunsen are said to devote themselves almost exclusively to inorganic chemistry, and on the other hand, Kekulé and Hoffmann are occupied mostly with organic chemistry. Fresenius has the reputation of doing more of mere technical analysis. He owns his laboratory, and although it is somewhat cramped for want of house-room, the appointments are very good. It is a model for economical construction as those at Bonn and Berlin are for outlay in mere decoration. The Leipzig Laboratory is not only the largest but is probably the best arranged in the world.

Now as to the professors. Bunsen receives more enthusiastic praise from his students than any one of the others, but Hoffman

has perhaps the widest reputation as an accomplished lecturer. The reason why I do remain here is that he has also the reputation of having so many irons in the fire that the students in the laboratory do not receive as much of his individual oversight as is desirable. In fact this is a charge made against most of the best known professors with the exception of Bunsen and Kekulé. Liebig and Wöhler are, as you know, quite old and do not pretend to work much. Kolbe has a fine reputation as a practical chemist, but he has some theories that are quite peculiar to himself.

The cost of living in these different places does not vary enough to signify. The farther south you go the cheaper is the living, but you lose the advantage of being among people that speak the classical German. From what I can learn I am inclined to think that Leipzig is the cheapest place in Northern Germany. At Bonn my expenses were about the same as in Cincinnati. In a large city a man can regulate his expenses according to the style of living he chooses, from very low prices to very high. At Leipzig I pay \$25 a month for board, lights, fuel and two rooms. I was offered rooms for less money but they did not suit me as well as the ones I have.

If a student comes here to spend some time in the study of chemistry his best plan is to go first to Heidelberg, then to Leipzig, and then to Bonn. He will thereby be enabled to reap all the advantages of the different systems. Nevertheless if his purpose is to perfect himself in assaying analysis of ores and technical labors generally, he had better go to some polytechnical school like that at Hanover, or to the mining school at Freiberg. The first thing necessary is for him to fix clearly in his mind what he wishes to accomplish, and then to follow a well digested plan without being drawn aside by subjects foreign to his purpose.

I have not spoken of physiological chemistry in this, because after a man is well grounded in pure and analytical chemistry, the application of his knowledge to medical or applied chemistry is but the work of a few months. In all universities there are men of more or less eminence who give lectures on chemistry as applied to medicine, to pharmacy, etc., etc., and in the hospitals he can have an opportunity of seeing these lectures put in practice.

Now let me finish this by remarking that a German university is not the place for boys, at least for those whose habits of study are not well formed, and who are not determined to make the most of the advantages offered to them. I have seen quite a num-



ber of American boys here who were not doing themselves nor Germany credit. The teaching in the universities is almost wholly by lectures, attendance upon which is not compulsory and is not even registered. For this reason, unless the student is naturally diligent and faithful, there is a strong probability that he will waste his time and his privileges. I am sorry to say also that this paragraph applies to some who are old enough to appreciate both the advantages offered and the obligations resting upon them for improving them.

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### *Rank in the Navy.*

At a meeting of the Alameda County Medical Association, held at its rooms in Oakland, California, October 17, 1870, the following was unanimously adopted :

WHEREAS, Of late repeated and persistent insults have been offered our professional brethren in the U. S. Navy, by the authority of the Navy Department, degrading them in rank and position; lessening, by example, the respect due their profession, and contracting their sphere of usefulness; and

WHEREAS, In every civilized community throughout the world, save in our Navy, the profession of medicine is considered at least equal in dignity and respectability to any other profession; and

WHEREAS, In our service the members of the Medical Staff are selected by competitive examination from among the graduates of our medical schools, while the line officers are selected to be educated at the country's expense from among the uneducated boys of the community, by favoritism, by relationship, or as has lately been proven, by purchase; and

WHEREAS, Rank and command are distinct ideas, having no necessary connection, there being a recognized necessity for *one* commander in all military operations, to whom the other officers are subordinate for the time being; and

WHEREAS, If physical courage and personal exposure are the only tests of merit, no corps can show, during the late war for example, a larger proportion of killed by the enemy, by fire, by water, or by the more deadly and insidious foe, disease, than the medical officers of the Navy; therefore be it

*Resolved*, That we consider the stigma to which they have been subjected as applying to the profession at large, and while it is

unremoved we consider that no young medical man having a proper regard to his self respect can accept an appointment in the medical corps of the Navy, and subject himself and his profession to the indignities which the self-constituted and newly-born "Aristocracy of the Line" impose.

*Resolved*, That we view with pain and sympathy the position of the senior officers of the Medical Corps, whose long service now renders it impossible for them to resign and commence life anew; and we call upon our Senators and Representatives in Congress to recognize their positions as co-equal with the highest in the service, by giving them military rank, such as is justly enjoyed by the Medical Staff of the Army, and by that in the services of each of the civilized nations of the world, together with such increased emoluments and promotions as will recognize their invaluable services to our country, and recompense them for the insults and oppression to which they have most unjustly been subjected.

*Resolved*, That a copy of these resolutions be sent to each Senator and Representative from this State, and that our delegates to the State Medical Society be instructed to bring this subject before that body for its action.

(Signed)

T. H. PINKERTON, M. D., PRESIDENT.

S. C. HOLMES, M. D., Secretary.

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*A Card From the Long Island College Hospital.*

It has recently come to our knowledge that a *quack advertisement* has been distributed under cover and stamp of the Annual Circular of the Long Island College Hospital.

The Regent and Faculty of the College embrace the earliest opportunity to state that this was done without our knowledge, after the circulars had been committed to the news agent for distribution.

They deeply regret the necessity for publishing this card, but duty to themselves and the profession requires that this statement be made public.

## Selections.

*Tubercular Phthisis.*—The patient, a girl eighteen years of age, was the subject of tubercular phthisis. On reference being made to the history of the case, it was found that both of her parents had been affected with phthisis; that her father had died of it; that the only other child of this marriage was a confirmed invalid with cough and chest affection; also that the mother had contracted a second marriage, of which, according to the patient's account, there had been issue of three children, who were all under twelve and healthy. Sir William Jenner said that it would be desirable to ascertain by personal examination the health of these children, because the point involved was one of great interest. He believed that with regard to children, both of whose parents are tubercular, the morbid tendency is not only transmitted to them, but intensified in them to a degree exceeding the sum of the tendencies of the parents; and that the intensifying of the tendency under these circumstances occurs equally in cases of insanity and nervous disease in general. On this ground Sir William said he objected to intermarriage, few families being free from a tendency to some disease; therefore, if two members of the same family became married, the tendency latent in them would be intensified in their offspring to the enormous degree already indicated. With regard to tuberculosis, he added that, though he could not give it as an ascertained truth, yet, from his experience at the Ormond-street Hospital for Children, he was led to believe that the father transmits the tendency with greater certainty than the mother, in cases where only one parent is affected.

There was also a report of the patient having had pneumothorax while in Brompton Hospital, from which she was discharged three months ago.

The chest presented the following physical signs: The left front was obviously larger and deeper from before backward than the right, and the shoulder and angle of the scapula were elevated; it advanced in inspiration, Sir William Jenner thought, as much as the right. In the left lateral region there was recession of the walls during inspiration, less marked, however, than on the right



side. With the exception of the second and third spaces, which receded during inspiration and bulged during expiration, and the first, which only bulged during expiration, the intercostal spaces were not on this side appreciable to the eye. The right front was a little flattened, and the intercostal spaces were depressed, while the heart was seen pulsating under the mamma. Below the nipple the chest walls receded distinctly during inspiration. There was great verticality of the ribs on both sides, especially the left. On percussion were found dullness of the left front, extending to a finger's breadth to the right of the sternum, and dullness of the lateral region as far downward as the margin of the thorax, and corresponding in extent to the obliteration of intercostal spaces on the right side; resonance of the supra and infra-scapular regions, but rather less resonance of the rest of the part than would have been expected, considering the thinness of the patient; the right lateral region, from the axilla downward, was hyperresonant. Posteriorly the left back was dull throughout. On auscultation a faint snore was found to accompany the respiratory act before and behind on the left side; and that it was produced there, and not transmitted, Sir William Jenner thought, was deducible from the amount of movement which occurred on that side. On the right side were, below the clavicle, blowing breathing, accompanied by a loud jerking snore; lower down a sort of respiratory snore, fading toward the base. The same sounds were audible posteriorly. Vocal fremitus, on the left side, was felt close to the spine, nearly down to the inferior angle of the scapula in the supra-spinous fossa, and above, but not below, the clavicle. On the right side throughout it was decidedly more distinct than in the left, but faded somewhat from above downward. The measurements were: right chest under mamma to mid-sternum, 14 inches; left,  $14\frac{3}{4}$  inches; above the mamma, immediately under the angle of the scapula on the right side,  $13\frac{1}{2}$  inches; left, 15 inches.

The reported pneumothorax, Sir William Jenner said, had probably been due to diseased tissue having broken down in such a situation as to admit the passage of air into the cavity of the pleura; that the air had been subsequently absorbed, leaving behind it fluid, which had then some time since, by pressure upon the lung, caused its collapse.

Sir William Jenner did not recommend paracentesis for the following reasons. The disease began with pneumothorax, and from the family history of the girl, from her aspect and build, and from

the almost invariable connexion of pneumothorax with tubercular softening, he had no doubt that she had tubercular disease of the lung, and perforation had resulted from some softened deposit. There were no urgent symptoms to render interference necessary, and no great difficulty of breathing. If the adhesions of the compressed lung were not sufficiently strong, or the lung not covered enough with false membrane to prevent its expansion, when the fluid was let out, the opening would probably be reformed, and active mischief established. Since the temperature was natural, and there were no active symptoms, and the girl was young, it would be better to wait. In time the lung would probably get so condensed that when the fluid was removed the lung would not re-expand, but the chest wall fall in and adapt itself, in some degree at all events, to the small lung.—Sir WILLIAM TENNER.—[*London Lancet*.

*Eczema Labialis*.—Two cases of some interest, as showing how, on account of the superaddition of accidental phenomena, eczema may vary in aspect, have recently been attending as out-patients in Dr. Fox's clinique. In both the seat of disease was the upper lip, just below the nose. The patients, who were both men, stated that the disease arose from a cold; that then the lip enlarged gradually so as to produce considerable thickening and swelling. It so happened that on one occasion a distinguished foreign dermatologist was present, and he suggested that the disease was of the nature of epithelioma; but the rapid cure and the history of the cases entirely set aside this explanation. When first seen the disease consisted of a swelling extending half an inch laterally from side to side of the frænum of the nose, and from above downward to near the junction of the mucous membrane and skin. It was, in fact, an oval swelling, the skin being raised about three or four lines. The swelling felt elastic; it was not hard, but it was tender, and smarting was often felt in it. The color was inflammatory. On close examination the hair follicles were seen to be more distinct than usual, and to be pustulating at their apices. There were here and there slight crusts. The hairs of the moustache, which had been cut off close to the lip, were not loosened nor altered in texture; but on pulling at them, much pain was at once experienced. In fact, it was, perhaps, the papillated aspect given to the general swelling by the enlargement and projection, so to speak, of the follicles that led to the idea of the disease being

epithelioma; but, on careful examination, it was seen that the disease was clearly produced by inflammation of the hair follicles, implicating the fibrous tissue round about to a greater extent than usual. This history showed the case to have commenced by the extension of a catarrh from the mucous surface to the hair follicles. There was no free crusting, as in ordinary impetigo labialis. The disease might have been termed by some non-parasitic sycosis, which is of course nothing more or less than catarrhal inflammation of the hair follicles; but, in the present instance, the aspect was not so distinctly pustular as is usual in inflammation of the hair follicles about the face, and the swelling of the deep fibro-cellular structures was very marked—much more marked than usual. The disease began as an eczema, involving the parts about the hair follicles. Dr. Fox has met with many instances of the condition now described; and he is very emphatic in condemning the use of irritants, stimulants, or active absorbents in the early stage of the disease. He states that all these remedies increase the follicular irritation. The use of litharge ointment so as to exclude the air, after hot fomentations, the avoidance of stimulating things, with alkalies and tonics internally, and subsequently strapping with lead or mercurial plaster, and the use, in the very chronic stage, of iodine, are most serviceable. But the avoidance of irritating applications, in the early stage, is the most important point to remember in reference to the treatment.—Dr. TILBURY Fox. [*London Lancet*.

*Ovarian Tumor*.—Hannah N—, aged thirty-nine, had first become aware of a swelling of the abdomen twelve years ago, but married three years afterward, the tumor showing no decided increase till after the birth of her third and last child, four years ago. In June, 1868, she was compelled to undergo tapping, and seventy-eight pints of fluid were evacuated. She was tapped a second time in October, 1868, when sixty-one pints were removed; and the fluid having again accumulated, she was admitted to the infirmary on January, 27. The abdomen then measured fifty-seven inches, was universally dull on percussion, except over the right loin, and transmitted the percussion wave on the least touch. With the exception of a pain in the right leg, she only suffered from the great inconvenience caused by the size and weight of the tumor. The menstrual flow had ceased two months before admission. There was no cedema.



The abdomen being opened, the peritoneal cavity was found to be free from ascitic fluid and adhesions. Fifty-seven pints of fluid having been removed from the tumor by means of a large syphon trocar, it came easily forward, together with a second cyst containing a number of smaller ones, which did not require puncture. A clamp was applied to the pedicle, and the wound closed with hare-lip pins. The tumor had been attached to the right ovary, and the left gland was found to be healthy. The operation was followed by slight vomiting only, which ceased spontaneously in the course of a quarter of an hour; and by a continuance of the pain in the right leg, which gradually, however, subsided. The dressings were renewed for the first time on the third day; the first pin was removed on the fifth, the clamp on the eighth, and the last pin on the thirteenth. The catamenia reappeared on the sixth day, a fortnight after the usual period, and have since recurred every three weeks. The patient was discharged, cured, thirty-three days after the operation.—S. C. SMITH. [*London Lancet*.

*Liquor Hydrargyri Perchloridi, P. B.*—Sir Thomas Watson, in his valedictory address as President of the Clinical Society, laid particular stress upon the necessity, not only of determining; but of securing, the proper action of medicines, and of administering them in as simple a form as possible—in fact, of avoiding mixing them with other substances that might confuse and vitiate the conclusions to be drawn from their actual operation. An exceedingly good illustration of the importance of attending to this rule is to be found on considering the existing mode of preparing the pharmacopœial solution of perchloride of mercury. As this preparation is one of the commonest in use, it is all the more important that its composition should be above suspicion. In the current number of the *Pharmaceutical Journal*, however, Mr. Martindale, of University College Hospital, declares that the use of hydrochlorate of ammonia as a solvent of the perchloride of mercury is followed by the formation of a double salt, ammonio-mercuric chloride, and that in the Liq. hyd. perc. P. B. not a trace of perchloride of mercury exists as such. Further, if common water be used, a dense, and at first flocculent, precipitate is formed (white precipitate), as the result of the presence of lime. The precipitate obtained from one pint of the P. B. liquor, made with New River water, weighed 2.7 grains, bearing the ratio of 27 to

100 of the perchloride used in the first instance. Thus upwards of one-fourth was converted into white precipitate; and if it were diluted, as it generally is when taken with more water, which would yield a further supply of lime, eventually a point would arrive when the whole of the perchloride would be converted into the insoluble white precipitate. If distilled water is used, these results do not happen; but, as Mr. Martindale very justly remarks, here we have one of our most active remedies rendered a comparatively inert and doubtful one, and its chemical and physical characters, and very probably its medicinal action, completely altered, by the mere substitution of common for distilled water. as is too often done in dispensing. This is, in fact, inevitable in hospitals. Hence it is advisable to omit the hydrochlorate in preparing the solution of perchloride of mercury, a simple solution of which in distilled water is quite stable.

*Two Cases of Ovarian Dropsy; one cured by Spontaneous Vesical Evacuations, the other by Two Tappings.*—Dr. Cahen related the above cases before the Hufeland Society. (*Berliner Klin. Woch.*, Dec. 20th, 1869.) One refers to a lady of twenty-one who, during her first pregnancy, presented an enormous abdomen. After the birth of the child her size did not diminish. The ovarian nature of the dropsy was apparent, and the mother was extremely thin and weak. The author does not say what treatment he instituted; but two months after the confinement severe abdominal pain occurred, and abundant urinary evacuations took place, which completely emptied the cyst. The second case is that of a lady who had ovarian dropsy at the age of fifteen; this lasted twelve years; the sac then burst, and the affection became ascitic. Tapping quite restored the patient. The patient then married, and remained well for twenty years, but childless. After this period she was taken very ill, and the abdomen swelled again. The dropsy became considerable, and the patient was looked upon as suffering from cystic disease of the right ovary. Her strength declined considerably, and Dr. Cahen proposed tapping, more as a palliative than with the hope of saving the patient. The operation was, however, successful; the cyst did not fill again, and the lady made a good recovery.

*Phosphate of Lime.*—A book has lately been published in Paris, by M. Dusart, on the physiological and therapeutical properties

of phosphate of lime. The author maintains, after numerous experiments in the animal kingdom, that this salt is the natural exciting agent in the functions of nutrition; that it induces the albuminoid matter to assume the cellular shape; and that it controls the formation of tissues. In short, according to M. Dusart, phosphate of lime is eminently an agent of nutrition. This view holds good, also, in respect of the vegetable kingdom; and the author asserts that the salt in question is concentrated in the leaf bud, but is almost absent from the fully developed leaf, so as to become concentrated in the seed preparing for the ultimate development of the embryo. M. Dusart points out that the phosphate of lime is always conjoined with nitrogenous matter in plants; and that the relative proportion of the salt and the nitrogen is always identical, wherever they are met with. In animals the same phenomenon takes place; and when they are made to feed much upon the phosphate, they absorb more food, and increase rapidly in weight, owing to the transformation of the albuminoid matter contained in the food into muscular fiber.

*Pre-pubic Lymphatic Gland.*—M. Durac directs attention, in the *Gazette Med. Chir. de Toulouse*, April, 1870, to a lymphatic gland situated just in front of the pubes, and at the roof of the penis. This gland, he considers, has not been described; and, probably forms the starting point of inflammatory swellings, either specific or not, which have been observed in that region. The author has noticed this gland to become enlarged and indurated in a syphilitic patient. He has, moreôver, published in a number of the same journal for last year, a case of pre-pubic abscess, which, probably, was connected with suppurative inflammation of the gland alluded to.

*The Sphygmograph in Epilepsy.*—M. Voisin, in the *Scalpel*, says that epileptic fits or vertigo produce—1st, a broken curve; 2nd, a more than ordinary length of ascending lines; and 3rd, diastole, which persists one or more hours after the fit. These characters are observed only at the time of the fit, and are noticed in healthy individuals whose circulation is disturbed by a long march or by a prolonged muscular effort. These sphygmographic signs are absent also in *simulated* epilepsy.

*Death-tests.*—At the meeting of the Academy of Medicine of Paris July 26th, Dr. Laborde read a paper on the above subject.



The author says: "If a highly polished steel needle be thrust to a sufficient depth into the tissues of a living man or animal, the needle after a short time will have lost its polish, and be in fact oxydized. If, on the other hand, a needle of the same kind be introduced into the muscles of a dead object, and left between twenty minutes and an hour, it will not turn dull." M. Laborde infers that the oxydation of the needle and the electrical and thermic phenomena connected with this oxydation are signs of apparent death; whereas the complete absence of oxydation and of the concomitant phenomena is a sign of real death. A committee, composed of Messrs. Gavarret, Beclard, and Vulpian, have been appointed to report upon this paper.

*Chloral in Midwifery.*—We reprint the following from the *Richmond and Louisville Medical Journal*, and we may in this connection remark that Dr. Comegys, of this city, has been administering chloral, in 15 grain doses, in cases of labor, and apparently with happy effects. Should any of our friends, however, desire to alleviate the severity of labor by this remedy, we advise them to experiment carefully, as they will doubtless secure, often very much, the effects of chloroform:

"Mr. E. Lambert, late House Surgeon to the Edinburgh Maternity Hospital, has published in the *Edinburgh Medical Journal* for August, an account of eleven cases of labor in which chloral was administered. Three of them were under the notice of the late Sir James Simpson. The conclusions at which Mr. Lambert arrives are the following:

"1. Chloral is an agent of great value in relief of pain during parturition. 2. It may be administered, under favorable circumstances, during and at the close of the second stage, with the result of producing absolute unconsciousness, in the same sense in which we understand unconsciousness under chloroform. 3. When thus given successfully, it has this advantage over chloroform, that it requires no interference with the patient. 4. It is desirable to retain chloroform in the position which it at present occupies in midwifery, and to reserve for the agency of chloral the first stage of labor. If, however, chloral, or some agent having analogous properties, be found successfully to relieve the pain of uterine contraction, the use of chloroform will be restricted to a lesser period of the duration of labor, or to the facilitation of

manual or instrumental interference. 5. It is demonstrated that a labor can be conducted from its commencement to its termination, without any consciousness of the part of the patient, under the sole influence of chloral. 6. The exhibition of chloral in nowise interferes with the exhibition of chloroform. 7. The proper mode of exhibiting chloral is in fractional doses of fifteen grains every quarter of an hour, until some effect is produced; and according to the nature of that effect the further administration is to be regulated. Some patients will require doses of one drachm; and it is better to produce an anæsthetic effect by three drachms given in the space of two hours, than by one drachm given singly. 8. The effects of chloral are continued beyond the period of complete parturition; and the repose experienced by the patient after her labor is one of the favorable circumstances to be noted in considering its application to child-birth. 9. Any stimulating effects, in the form of general excitability, occasionally observed during the administration, have passed away very rapidly. 10. Chloral not only does not suspend, but rather promotes uterine contraction, by suspending all reflex actions which tend to counteract the inevitability of the centers of organic motion. 11. Labors under chloral will probably be found to be of shorter duration than when natural, for unconscious contractions appear to have more potent effects than those which are accompanied by sensations of pain. 12. Experiments are required in order to determine whether there exists the same antagonism between ergot and chloral as is known to exist between strychnia and chloral. 13. The general conditions under which chloral is to be administered are the same as those which regulate the administration of chloroform, and the rules laid down by Sir James Simpson in connection with this subject must be rigidly adhered to.'"

*Iodide of Potassium in Asthma.*—Much has been said and written in past years upon the merits and demerits of the iodide of potassium in asthma.

And of late, I notice, a writer has been treating the subject, and regards its application as more especially appropriate to bronchial asthma; he relates a case in which he exhibited the drug in large and oft repeated doses, with complete success, for that time, but failed most signally with this treatment in a future attack of the same patient, soon after.

Now, sir, I am not disposed to criticise that writer's views of the

disease, or his practice, for he is evidently on the right track and in good season.

But I think he is in too much hurry, and treats the patient with too large doses, and repeats them too often; he, in fact, feeds his patient with a powerful and potent remedy too rapidly, faster than the system can appropriate it; and hence the absorbents and secernents are to a certain extent overcharged, surfeited, and perhaps for a time paralyzed; and in the future have either no desire for that kind of stimulus, or are unable to receive it.

It has been my painful privilege and experience to know much of this disease for a period of over fifty years, by personal acquaintance. I inherit it as an heir-loom from two generations before me; and by that same law of transmission, it outcrops again in the one which follows me. I have met the disease in most or all of its phases, in my own person and in the sick room, and have treated it in all its forms; the dry, the humid, the spasmodic or bronchial, and the more fearful emphysema. I say more fearful, because the conditions of this disease are such as to render it of greater duration, equally or more distressing, and affording no hopes of cure, and but little prospect of relief.

I, too, have often administered this drug, and like the writer alluded to, have met with varied effects, but think I have seldom found a case where it lost its effect so absolutely or so soon, although such instances may occur.

In my own case, although constitutional, it is bronchial, spasmodic and nervous. I have used the remedy for years, to be counted by tens, perhaps by twenties. And yet it has never failed me, and is thus far ever sure to be a remedy of inestimable value on every occasion of attack; but I never give such large doses, seldom more than five grains a day, and that at bedtime. And if threatened or attacked, this quantity taken in the evening usually insures me a night of comfortable rest, with ability to resume my daily labor on the following day. But I do not repeat the dose unless the attack is also repeated; and here, it seems to me, is the cause of the success in one case and of the failure in the other, for, surely, I have ever found it a most valuable remedy for myself and others thus affected. Nor do I find its benefits apply to the bronchial form only, but regard it as an available and reliable remedy in other forms also, and in none have I found it to fail completely, unless in that peculiar form or stage when the diaphragm is seem-



ingly flexed and immovable like a sheet of iron across the trunk, and the patient in a gasping state.

Here the iodide does fail, and here, if ether or chloroform affords no relief, remedies are of little use.

J. P. WHITEMORE, M. D.

*Haverhill, November, 1870.*

*Long Island College Hospital—New Hospital Building.*—We learn that the Regents of the Long Island College Hospital, Brooklyn, N. Y., finding their present accommodations insufficient, are engaged in the erection of a new building, to be completed and ready for the reception of patients by the 1st of March, ensuing. The new wing will be about 150 feet front and three stories high, and is to be constructed on the most approved principles of modern hospital structures. Part of it will be occupied as an amphitheater and operating room.

*Biographical Dictionary of Deceased American Physicians.*—Dr. J. M. Toner, of Washington, D. C., is desirous of obtaining information which will aid him in the publication of a Biographical Dictionary of Deceased American Physicians. The work is already in a state of considerable forwardness, and is designed to contain a biographical sketch of every deceased practitioner of regular medicine, from the earliest settlement of our country to the present time.

Hundreds of physicians have died in different parts of the United States, after devoting a long and useful life to their profession, of whose existence and labors there is no record. This should not be so. The want of a work furnishing an outline of the lives of American physicians has long been felt; and that the project meets the approbation of the profession and of the relatives of deceased medical men, has already been evinced by the valuable contributions from different parts of the country.

The success of the undertaking must obviously depend, in a great measure, upon the co-operation of the medical profession, and such relatives and acquaintances of deceased physicians as may have it in their power to communicate the essential information.

*The Magnetic Wells of Michigan.*—Some months ago we had an account of these from a well-known physician who had

visited them. At the late meeting of the American Association for the advancement of science, Prof. Winchell read a paper concerning them. After numerous experiments his conclusions may be condensed as follows: 1. Nearly all pieces of iron and steel are found possessed of permanent but varying polarity. 2. Neutral iron is polarized by being placed in the magnetic meridian or in a vertical position. 3. This induced polarity can be detected in its effects upon a permanent magnet. 4. The mineral waters of Michigan tend to induce south polarity (*i. e.*, the same as the south end of the needle) in the outer end of a rod of soft iron passed through a cork into a bottle of the water. 5. This property is retained by the water for weeks and months. 6. A rod of steel, or a knife blade, immersed in water from 30 minutes to 10 hours, acquires very sensible polarity, though practically neutral before immersion. 7. No satisfactory evidence exists that the water itself is polarized, or that magnetism can be bottled up in it. 8. The phenomena are more likely to arise from some chemical action between the water and the iron; and this supposition is strengthened by the fact that they arise equally when the rod is simply moistened, when it is immersed in water rendered artificially alkaline or salt, and when the surface of the steel is unpolished, and do *not* arise when pure rain-water is employed.

*Displacement and Inflammation.*—On this topic Dr. H. Bennett read an article given in the *British Medical Journal*, concluding with the following summary:

I would recapitulate the views I have endeavored to express in the following terms—

1. I consider that, under the influence of mechanical doctrines pushed to an extreme, uterine displacements are by many too much studied *per se*, independently of the inflammatory and other lesions that complicate and often occasion them.

2. That the examinations made to ascertain the existence of inflammatory complications are often not made with sufficient care and minuteness, is evidenced by the fact that I constantly see cases in practice in which inflammatory lesions have been neglected entirely, and in which the secondary displacements have been alone studied and treated.

3. That inflammatory lesions are often the principal cause of uterine displacement through the enlargement and increased weight of the uterus or of a portion of its tissues which it occasions.

4. That when such inflammatory conditions do exist, as a rule they should be treated and cured, and then time should be given to nature to absorb and reduce hypertrophied and engorged tissues before mechanical means of treatment are resorted to.

5. That the relief from the sensation of bearing down which pessaries and bandages give is no real criterion of their being the proper means to use, such relief being often felt when there are inflammatory lesions present, which their presence aggravates.

6. The above statements must not be considered in any way to imply that I do not recognize other causes of displacement of a non-inflammatory nature, such as laxity of ligaments and soft parts, wide pelvis, laceration of perineum, severe shocks, etc.

*The Use of Acetic Acid in Affections of the Conjunctiva and Cornea.* By B. A. Pope, of New Orleans, Louisiana.—The acid used in the following experiments was uniformly of the specific gravity of 1,041 (No. 8). My experience in its use in other strengths is not sufficiently extended for the expression of an opinion upon its value.

At first I applied the acid by means of a soft piece of wood, sharpened to a very fine point; but subsequently substituted the smallest size camel's-hair brush. In making the application, great care should be taken that the brush should not hold too much of the acid, and it is well, also, to remove any moisture from the surface to which it is to be applied.

Its action in the strength indicated is that of a mild escharotic, when applied to the cornea or the conjunctiva, causing but moderate reaction and very transitory pain. As compared with the nitrate of silver, used in strong solutions or in the solid state, the pain and irritation produced are very slight. This is also true as regards its action when compared with that of the sulphate of copper. The epithelial slough falls away rapidly, and leaves a clean surface, which, as a rule, heals promptly.

In the following cases I found this acid to be a valuable agent:

1. In a case of *warty degeneration* of the palpebral conjunctiva.

The patient, a boy twelve years of age, had been treated for two years before coming under my care. The tarsal conjunctiva of the upper eyelids was almost entirely occupied by these growths, only the inner and outer portions of the lids having been free from them. They were packed closely together, and were flattened upon their surfaces where they came in contact with the eye-



balls. The largest of the tumors was about one-sixth of an inch in length, firm in structure, and sprang from the middle of the lids. Here and there, toward the inner and outer canthi, there were small flat growths varying from the size of a small pin's head to a line in diameter. There was only moderate conjunctival irritation, and but little secretion of mucus. The cornea was perfectly healthy, but the use of the eyes was unpleasant.

The growths were excised as closely as possible to the surface of the lids. They, however, so completely occupied the tarsal surfaces of the lids, that it was impossible to make the excision so as to leave a smooth surface. The tendency to reproduction was very great, and it was found necessary to cauterize the diseased surfaces with the solid nitrate of silver every day, for at least two months. At the end of that time, the right lid was well. The treatment for the left lid was terminated at the end of five months. During the latter part of the treatment the sulphate of copper was sometimes used. After the first two months, the nitrate of silver was generally applied every second or third day.

After three months, the patient again returned for treatment, the left lid being almost in the same condition as before I had commenced treatment; and the disease also commencing to show itself again on the right lid. I now determined to try the effects of acetic acid, without previously excising the growths.

The applications were made once a day, for about six weeks. In a week from the commencement of this treatment, the right lid was well. In from six weeks to two months, the left lid was also well. During the last week of the treatment, the solid nitrate of silver was used two or three times with benefit.

The pain was very moderate, and the irritation following the applications was very slight. As compared with the applications of the nitrate of silver, or even of the sulphate of copper, the difference in these respects was very great. The patient consequently expressed himself as being much in favor of the change in treatment.

In the latter part of the treatment the whole thickness of the epithelial layer would slough in places, and this would be followed by a little hemorrhage and some increase in the amount of pain. It is now about five months since the cure was effected, and there is no tendency at present on the part of the disease to return.

There are in such cases serious objections to excising the growths, and following this by the use of strong caustics. This treatment

almost certainly produces an uneven surface, which causes chronic irritation, by the unequal pressure of the surface of the eyelids upon the balls. If strong caustics be used for a long time upon the growths, the violent irritation produced is liable to be prejudicial to the healthy conjunctiva and cornea. Acetic acid seems to answer the indications best, since its action appears to be in a great degree confined to the immediate points to which it is applied. In case the growths are isolated and large, and attached by a small base, excision is, of course, indicated. In this case the deeper tissues of the lid were beginning to be involved in the morbid process, and the tumors were closely packed together.

Each application of the acid caused the destruction of the epithelial layer in which the morbid process seemed to originate. As a rule, it did not slough at once, but upon the return of the patient in twenty-four hours, the epithelium had been reproduced. The acid was always applied very freely.

2. In the greatly relaxed condition of the conjunctiva of the culs-de-sac with hyperthropy of the epithelial layer, which occasionally follows upon chronic conjunctival disease, I have frequently found this condition of the conjunctivæ in cases of chronic catarrhal affection occurring in orphan asylums, and in some instances they were very rebellious to the usual treatment. This condition renders the patient constantly liable to relapses. One case of this kind, in which a constant irritation was kept up by the condition of the conjunctiva of the upper conjunctival culs-de-sac, was cured completely by two applications, after having resisted the usual treatment for weeks, without decided progress toward a cure. In this case, upon everting the upper lids, a large flabby mass would protrude, which had a macerated appearance.

3. I have found benefit in its *occasional* use in some cases of trachoma in the stage of development, where the neoplastic growths were *very superficial*, and where the usual treatment seemed for the moment to favor the progress of the disease. Its application should be confined to the granulations, the surrounding conjunctiva being spared.

4. In a case of inflamed pinguecula, where excision was declined by the patient.

5. In the hyperthrophied condition of the lachrymal caruncle and semilunar fold in cases of pterygium. It is probably best to use it before operating the morbid growth, since the cure is favored by having the tumors free from irritation before operation.

6. In two cases of *calcareous degeneration* of the *epithelial* layer of the *cornea*.

In each of these cases both eyes were affected, and in both the disease was more advanced in one eye than in the other. The treatment was completed in only one of the cases. In this case the result was excellent in one of the eyes, and very unsatisfactory in the other. The eye which did well, was by far the worst, the patient not being able before treatment to read the large letters of signs upon the streets, and the eye having become affected with *strabismus externus*. The eye which was a failure in respect to the operation, did quite well after two or three operations in which the acid was used, and improved decidedly in the sight; but the last operation was followed by considerable irritation of the cornea and acute inflammation of the lachrymal sac. This last operation was performed with instruments, and without the use of the acid; so that the failure can in no way be connected with its use. In the cases reported by Bowman and Dixon, the disease had advanced so far that the calcareous mass could be removed in a continuous solid plate. In the cases treated by myself, the disease was in a comparatively early stage of development, and might easily have been mistaken for opacities resulting from a diffuse superficial keratitis. In fact, both cases had been so considered, previously to their having consulted me, and had been treated accordingly, without any effect upon the course of the disease. From two of the corneæ I obtained small, coarsely granular, calcareous plates; but the epithelial layers were mostly in a sclerosed condition, the cells still retaining their forms and proper relations when seen under the microscope.

The treatment was commenced by the application of the acid at the circumference of the diseased parts. After an hour or two, the sloughing mass was removed, and if the whole thickness of the diseased epithelium had not been destroyed, the application was renewed at once, with, however, greater care than in the first application. Before another application was made, time was allowed for the restoration of the epithelium and the subsidence of irritation. In some of the operations I first scraped away much of the epithelium, and then made a slight application of the acid to the remaining deep epithelial layers.

The restoration of the epithelium took place very rapidly, and with so nearly normal transparency that in the eye on which the treatment was successful, the patient could read No. 1 of Jæger's



test-print, at 7" or 8", while before the operation, with this eye, which was much the worse of the two, the patient could not distinguish the letters of large street signs, and the eye had in consequence deviated outward.

From the observation of the effects of treatment in these cases, I concluded that unless some other procedure than that with the knife, or by sloughing away the epithelial layer, be resorted to, the disease had best be allowed to run its course to a rather advanced stage before operative intervention.

7. In a case of dense opacity of the cornea, the margin of which reached the center of the cornea. This case I treated from the eighth day of an attack of ophthalmia neonatorum, complicated almost from the first by a severe attack of diphtheritis conjunctivæ. I first saw the case on the eleventh day after the birth of the child. There had been no treatment, and I found the cornea commencing to slough, and severe iritis already existing. The eye was saved with difficulty, and perforation of the cornea was prevented. A circular slough came away, about  $1\frac{1}{4}$  line in diameter, and probably involving  $\frac{1}{3}$  or perhaps a little more of the thickness of the cornea. The healing of the ulcer and the condensation of the cicatrix was slow, on account of the unfavorable external and internal conditions present. At intervals, for some months, the various treatments usual in such cases for diminishing corneal opacities were used, but with unsatisfactory results. After some months had elapsed without treatment, I commenced the use of acetic acid. Its application was confined to the dense opacity, and its immediate vicinity, where the opacity was very slight. At first the application was made once a day, for three consecutive days, so that an ulcer resulted from the treatment. This was allowed to heal, without interference. This treatment was repeated after the ulcer had healed, and all irritation had ceased. The application of the acid was made subsequently about three times, but each time only two applications were made. The opacity still remains, but is decidedly diminished in density, and somewhat also in extent. The healing of the ulcer took place under the most favorable conditions which will probably sufficiently explain the improvement. In support of this view, I might cite the case of a child, about three years old, who had a tolerably dense central opacity of the cornea, which sloughed away under the influence of a severe catarrhal inflammation of the conjunctivæ. The inflammation produced iritis and considerable softening of the corneal tissue. After the cure of these inflammations, the ulcer healed with a remarkable improvement in the opacity. The first cicatrization had taken place while the conjunctivæ was still inflamed, the disease having been left mostly to take its natural course. *Archives of Ophthalmology and Otology*. [Richmond and Louisville Medical Journal.

## Editorial.

*The end of another year* is upon us. For good or bad, we have closed up our year of editorial work. So many of these returning days have come to us, that we scarcely care to make this an occasion of unusual comment. We do not indulge in any self laudation, and yet, in reviewing the volume of the LANCET AND OBSERVER, which this number completes, we can not refrain from a degree of complacency. It has been our aim to afford a vehicle for the contributions of all those devoted to the advancement of medicine in all its departments. It has been our purpose to record the improvements of our profession throughout the country. It has been our desire to defend all those engaged in the legitimate pursuit of medicine. That we have come short in some of these plans, or that we have overlooked the claims of some of our friends, is not strange.

For the future, the same aims as to the cultivation of our profession and its interests, will influence us. Striving to be just to our friends; and generous to our foes, if we have any, we shall depend upon our judgment as to those matters which will prove of interest to our readers.

In matter, we shall hope to give a large amount of original contributions in our next volume. Some of the most active physicians of this city and valley are promised for papers. The clinical material of our City Hospital is becoming more and more systematized, both for observation and record; the *Staff* will furnish regular clinics and clinical reports in the future. The Academy of Medicine, of this city, affords a large amount of valuable matter in its varied reports, cases, and discussions; these will be used so far as we have space. Besides all these, we shall expect our friends everywhere, all over the country, to send us the results of their ripe practical experience, the discussions of their local societies; and, in a word, everything that will make this journal the most satisfactory and complete mirror of practical medicine in the land. Such are our purposes and expectations for the future. In the meantime, we extend to our readers and patrons everywhere, our thanks for the past friendships, and past forbearances, and our solicitation for continued favor and support.

**A Woman at the City Hospital.**—Some mornings since, the propriety of the class at the hospital was somewhat startled by the entrance of a lady as an attendant on the regular clinical instruction. She proved to be a graduate of some school of medicine, and it was very soon established that she was present for observation. We are glad to say that no trouble has resulted. The conduct of the lady has been proper, the deportment of the class decorous. While evidently desirous of making the clinics a means of improvement, the lady has had a careful eye to the proprieties, and without any parade or demonstration, has quietly withdrawn from the amphitheater, whenever cases have been presented of questionable delicacy. But, in all respects, she has been treated courteously by the staff and the class.

**Claude Bernard.**—One of the original articles of this number is a translation by Dr. J. S. Morell, of Savannah, Ga., of a lecture by Claude Bernard. It will be found of great interest to the physiological student. Dr. Morell has made a complete translation of the lectures of Bernard, and would be glad to publish his labor in the form of a complete volume. Should the profession exhibit an interest in the enterprise to that extent, they may communicate to Robert Clarke, of this city, who proposes the publication as soon as sufficient encouragement is promised. Dr. Morell also contemplates the translation, at an early date, of the great work of Lancereaux; *Treatise historique et pratique de la Syphilis*. We have also been placed under obligations to the doctor for a copy of Bernard's lecture on the Physiology of the Heart, fully illustrated. So it will be seen that Dr. Morell is one of the workers of the day, and deserves hearty sympathy and encouragement. Perhaps we should further say that the proposed translation of Bernard will comprise twenty-five lectures, and make a volume of about 400 pages, abundantly illustrated with wood cuts.

**Dr. R. R. McIlvaine** is on a visit to our city. How strange it sounds to Cincinnati doctors, to speak in this way. The doctor has been so long one of the features of our profession here, that he seemed almost inseparable from it. He was one of the active founders of the Academy of Medicine, and for several years its President. He has also been engaged in most of our prominent professional movements in the city and State. A few months ago



he deliberately shook off the dust from his feet, in our midst, and cast in his lot with the doctors of the great New York Babel. We wish him good fortune, and a fresh lease of life for work and enjoyment.

**American Wines.**—Some time ago we noted the progress in wine-making in the vicinity of Cincinnati, and especially at the Hillside Vineyard of Mr. E. A. Thompson. Since then, we have had the pleasure of inspecting some of the results of the present season's vintage, as fermented by the new "air treatment." By this process, Mr. Thompson has already been able to send wine into the market, of this vintage. He states that the fermentation is complete in one week; quite clear in two weeks; and ready for bottling in five weeks or less. This appears to be a great thing for the wine-growers; thereby, will be a saving of a very considerable per cent., both in the quantity, as well as the delicacy of the bouquet.

**Time to Make up Clubs.**—We are enabled to afford to subscribers the same advantages, with several Literary Periodicals, as in the past:

Harper's Magazine (weekly), or Bazar, price \$4.00, and Lancet and Observer, \$6.50.

Godey's Lady's Book, price \$3.00, and Lancet and Observer, \$5.50.

Atlantic Monthly, " 4.00, " " 6.00.

With the Medical Journals, as follows:

London Lancet (American Edition), price \$5.00, and Lancet and Observer, \$7.00.

Gynecological Journal, price \$3.00, and Lancet and Observer, \$5.00.

As we are advised, from time to time, of any advantages to our subscribers, for other periodicals, medical or literary, we shall take pleasure in giving them the advantage.

**The Black Arts in Medicine.**—We have received a pamphlet bearing this title, from its author, Dr. John D. Jackson, of Danville, Ky. As a specimen of the printers' art, Robert Clarke & Co. have outdone themselves; we have rarely seen a more perfect gem in its way.

The author is well known to the profession of Kentucky, as a cultivated physician and contributor to medical literature. He is also known to the readers of this journal, having furnished several

articles of interest to its pages. The present *brochure* was read before the members of the Boyle, Lincoln, and Mercer counties Medical Society, at Danville, Ky., in September last. Under the guise of a letter from Dr. Solomon Macchiavelli Sharpe, A. B., A. M., M. D., etc. etc., to John Charlatan Greene, M. D., there is related the "Arts," which may be made use of to secure fame and money in the practice of medicine. We have been tempted to quote largely from the letter, but after all, the "Black Arts" are pretty well understood and appreciated in our profession. They have been largely successful in the past, and will doubtless be in the future. Still men who resort to them are also appreciated by their brothers in the ranks, and do not secure from them a vast amount of affection. In the view of "Dr. Sharpe," the turning point may be expressed in the saying of Wallenstein to his son. "Observe," he says: "*Quam pauca sapientia regit mundum.*" So then the art of getting a practice is only some mode of throwing dust in the eyes of the dear people, and for the most part, this is expressed in the idea of George Francis Train: "For God's sake don't let the people forget me." In conclusion, however, we have the wise suggestion offered us: "If you have it in you, John, to pursue the strait and narrow path, and climb the rugged heights, then I advise you to ignore all I have written. But if not, then the hints above given, may prove useful to you, in piling up pelf."

**Settlements.**—Having completed our year's task, we can surely ask all in arrears to remit their subscription at once. We expect our friends to do this now, that we may close up the financial affairs of the journal, without further delay. We also desire to remind our friends everywhere, that we are in their hands for the further prosperity and increased circulation of the journal. Shall we have several hundred *new subscribers* as a New Year's gift, to start off our new volume? There is scarce a locality in the country where one or more names might not readily be obtained, if a reasonable effort were made; and in many sections we are sorry to know that large numbers of physicians take no medical journal whatever. Let us make one grand effort, friends, to stimulate these laggards to a new and better professional ambition. It will be better for them, better for professional interests, *better for us*, that all these enter upon the year 1871, as subscribers to the LANCET AND OBSERVER.

*Gody's Lady's Book for 1871*, will be its forty-first year. We have frequently had occasion to call the attention of our lady friends to the attractions of this favorite magazine. Its engravings are alone worth more than the subscription price. In another place we give our terms for clubbing.

*Sprague*, corner of Fourth and Vine, has the finest lot of clothing in the city. Just now his specialty is gentlemen's and boys' winter wear.

*Histology of Minute Blood Vessels.*—We have been placed under special obligations to the Surgeon General's office, for the report of Assistant Surgeon J. J. Woodward, U. S. A. It consists in a critical examination with the microscope, of the minute anatomy of the blood vessels, especially aided by photo-micrography. The peculiar interest in this report is found in the bearing it has upon the observations of Cohnheim, in regard to the white-blood corpuscles. The report is illustrated with several wood cuts, and is accompanied with eleven beautiful photo-micrographs. Dr. Woodward has been engaged in this kind of observation for a long time, and has been exceedingly successful, as any of our readers who witnessed the display at the Army Medical Museum, during the last meeting of the American Association, at Washington, will bear testimony. We understand this unique series of micro-photographs, can be furnished from the Surgeon General's office, by application to Surgeon Woodward; but we are not advised as to the price.

*Transactions of the Medical Society of West Virginia, 1870.*—The annual meeting was held in Parkersburg, June 1st and 2d, 1870. Besides the usual record of the proceedings, we find quite a number of papers and reports, all of which indicate that the Society has entered upon a vigorous career, and that its members are earnestly at work for the profession and all associate interests. The Society meets next year at Martinsburg.

*William Baldwin & Co.*, who publish the *American Chemist*, will issue a complete list of all the American and Canadian Medical journals in their forthcoming edition of the *Physicians' Monitor*.



***Prescription and Clinic Record.***—William Wood & Co., of New York, issue a convenient little pocket-book with this title. Each page has space for a brief note of the case, a prescription slip, and room for its copy. Price 50 cents, each book of one hundred sheets.

***The Indiana State Medical Society.***—We gave an abstract of the proceedings of this Society at the time of its meeting last May. By some oversight the printed volume of transactions has been overlooked. Few of the published transactions of our State Societies come to us in so handsome a garb. Not only is the paper and typography elegant, but the arrangement is peculiar and attractive. The papers are placed at the first of the volume and the proceedings last. Each paper, however, is accompanied with a full report of the discussion held upon it. This has required the services of a very efficient secretary, and Dr. G. V. Woolen certainly deserves the thanks of the Society. The various reports are maturely prepared, but we have not time to make a synopsis of their contents.

***Archives of Ophthalmology and Otology.***—We have received No. 2 of this contribution to Ophthalmology. It is edited by Prof. Knapp, of New York, and Prof. Moss, of Heidelberg, and is issued simultaneously in English and German. We observe that Dr. Knapp is himself one of its most copious contributors. The present number, like No. 1, is handsomely illustrated, and every way well gotten up. It may be had through George E. Stevens & Co., of this city.

***Chloral in Labor.***—MR. EDITOR: You have already published some practice of mine in the hospital, reported by my assistant, Dr. Green, showing the value of chloral in intermittent fever, delirium tremens, chorea, insomnia, and the distressing cough at night in phthisis. I now wish to say, that I have used it often enough, to recommend it in labor, to alleviate the pangs of the dilating pains, and to favor dilatation; and also to mitigate the suffering of the expulsive pains.

I give 15 to 20 grains, at such intervals as the state of the case indicates, by no means giving it regularly. I have not used as much as a drachm in any one case.

C. G. COMEGYS.

*Obituary.*

DR. WILLIAM SHERWOOD died at the residence of his son-in-law, in this city, Nov. 19, after a long and painful illness.

Dr. Sherwood came to Cincinnati as an "eclectic" practitioner, about twenty years ago. He occupied a chair in the "Institute" for some years, and for a time was editor of an eclectic journal of medicine, which had an existence for a few years in this city. A number of years ago he renounced the eclectic system, and during the remainder of his professional life, affiliated heartily with regular medicine; in the meantime, attending a course of lectures, and being regularly examined for his degree in the Miami Medical College. About two years ago, he retired from practice, and engaged in life insurance business. During all of this year, however, he has been a constant invalid, suffering much of the time with extreme pain. His condition was early diagnosed to be a malignant disease, involving the caput coli. Ten days before his death, he vomited large quantities of stercoraceous matter; and this feature continued at intervals, until death, although his nourishment was chiefly by injections. On *post-mortem* a large cancerous mass was found attached to the peritoneum, and embracing the head of the colon, dipping down to embrace the capsule of the right kidney. There were, also, patches of deposit in various portions of the mesentery, on the under surface of the loin, and small points on the peritoneal surface.

Dr. Sherwood was an earnest, conscientious man, and a sincere Christian. For many years, even before entering upon the study of medicine, he was an acceptable local preacher in the Methodist Church.

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*Tribute of Respect.*

The physicians of Dayton, Ohio, met in the parlor of the Phillips House, and organized for business by electing Dr. Claggett Chairman, and Dr. E. Jennings Secretary.

On motion of Dr. Gundry, the Chairman appointed a committee of five, consisting of Drs. Gundry, Davis, Neal, Koch and Nune-maker, to draft resolutions expressive of the feelings of the meeting in regard to our deceased colleague, Dr. HIBBARD JEWETT.

The committee then reported the following preamble and resolutions, which were unanimously adopted :

WHEREAS, It has pleased the Father of Mercies to remove from among us our late associate, HIBBARD JEWETT, M. D., after a useful and well governed life, and a very extended professional career,

*Resolved*, That we, as physicians, recognize in the death of Dr. HIBBARD JEWETT the loss of a cultivated and energetic member of our profession, who for forty years in this community illustrated in his daily life the sterling qualities required for the successful exercise of our profession. We remember his untiring diligence and attention to all professional duties, and recall with admiration that when he was for so many years constantly depressed by great pain and disease, which he bore with quiet resignation, he never faltered in the discharge of his duties as a practitioner, nor in the endeavor to add to his already well digested knowledge of the Medical Science. He added other claims to our remembrance. He was in every respect a most excellent citizen, and filled positions of trust with benefit to the community and great honor to himself.

*Resolved*, That we express our deep sympathy with the remaining family of the deceased, and that, as a mark of respect, we will attend the funeral of our departed colleague in a body.

*Resolved*, That copies of these resolutions be sent to the family of deceased, and furnished to the daily papers of Dayton and the medical journals of Ohio.

R. GUNDRY, *Chairman*.

J. DAVIS,

THOMAS L. NEAL,

E. KOCH,

H. B. NUNEMAKER,

*Committee.*

The Chair also appointed Drs. Shriver, Reeve, Gundry, Davis, Maetke and Claggett, pall-bearers.

Meeting adjourned, to meet at the Phillips House at half-past one o'clock, Friday afternoon.

G. A. CLAGGETT, *Chairman*.

E. JENNINGS, *Secretary*.













